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EXPLANATORY NOTE

1. *The present Table of Contents refers to the numbers of the International Review of Agricultural Economics published from January to December 1921 and includes, therefore, all the articles and notes dealing with co-operation, association, insurance and thrift, credit and agricultural economy in general contained in these volumes.*

2. *The articles and notes relating to each part have been grouped into classes of which a list will be found preceding the Index. The classification embraces all the subjects which are included in the programme of the Review. It will be evident, therefore, that certain classes of subject which are only occasionally dealt with may not be represented in the Index of any particular year. In our classification we have followed the rule of single entry and placed under only one heading those articles and notes which, from the nature of the subject treated, might appear in more than one group.*

As it is not in every case clear why an article or note has been assigned to one group rather than to another, the reader must be prepared to refer to the several analogous groups in any of which a particular article or note might appear. A dairymen's co-operative society, for example, might have as its object the protection of the general economic interest of dairy farmers as a class, or simply the improvement of the methods of production, transport, and sale, or again the purchase and collective use of animals of the special dairy type. An article relating to such a society might appear under various headings according as it dealt more particularly with one or other of these objects.

3. *In each group the articles and notes have been subdivided by countries following the alphabetical order. For each country the articles are arranged in the chronological order in which they were published. We have added a table giving the classification by countries.*

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PRINCIPAL WEIGHTS, MEASURES AND MONEY OF THE VARIOUS COUNTRIES AND THEIR BRITISH EQUIVALENTS

1 Cadastra, arpent (Hungary)	=	1.42201	acres
1 Centimetre	=	0.393715	inches
1 Cho (60 ken) (Japan)	=	119.30327	yards
1 Crown (100 heller) (Austria-Hungary)	=	10 d.	at par
1 Crown 100 öre (Denmark, Norway, Sweden)	=	15.1	/8d. at par
1 Deciatine (2 tchetwert, (Russia)	=	2.69966	acres
1 Dinar, gold (100 para, (Serbia)	=	933/64d.	at par
1 Dollar, gold (\$) (100 cents) (United States)	=	48.5/16d.	at par
1 Drachm, gold (100 lepta) (Greece)	=	933/64d.	at par
1 Egyptian Kantar	=	99.0498	lbs.
1 Feddan Masri (24 Kirat Kamel) (Egypt,	=	1.03805	acres
1 Florin, gold, or Gulden (100 cents) (Netherlands)	=	15.753/64d.	at par
1 Fran. (100 centimes) (France)	=	933/64d.	at par
Gramme	=	0.03527	oz.
Hectare	=	2.47109	acres
Kilogramme	=	2.2	lbs.
Kilometre	=	1.093.613	yards
Kokou (10 To) (Japan)	=	1.58726	quarts
1 Lei, gold (100 bani) (Rumania)	=	933/64d.	at par
1 Leu (100 stotinki) (Bulgaria)	=	933/64d.	at par
1 Lira (100 centesimi) (Italy)	=	433/64d.	at par
1 Litre	=	0.21998	gallons
	=	0.0275	bushels
1 Mark (100 Pfennige) (Germany)	=	11 3/4d.	at par
1 Mark (100 penni) (Finland)	=	933/64d.	at par
1 Metre	=	3.28084	feet
1 Milreis, gold (Brazil)	=	28.261/64d.	at par
1 Milreis, gold (Portugal)	=	48 510/64d.	at par
1 Peseta, gold (100 centimo) (Spain)	=	933/64d.	at par
1 Peso, gold (100 centavos) (Argentina)	=	38.1137/64d.	at par
1 Pound, Turkish, gold (100 piastre) (Ottoman Empire)	=	188.015/64d.	at par
1 Pund (Sweden)	=	0.93712	lbs.
1 Quintal	=	1.96843	cwtis.
1 Rouble, gold (100 kopeks, (Russia)	=	28.1 3/8d.	at par
1 Rupee, (16 annas) (British India)	=	1/10	of £1 (gold)
1 Talari (20 piastre) (Egypt)	=	48.111/32d.	at par
1 Verst (Russia)	=	1166.64479	yards
1 Yen, gold (2 fun or 100 sen) (Japan)	=	28.037/64d.	at par
1 Zentner (Germany)	=	110.23171	lbs.

INTERNATIONAL INSTITUTE OF AGRICULTURE
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Part I: Co-operation and Association

GERMANY.

MISCELLANEOUS AGRICULTURAL CO-OPERATIVE
SOCIETIES DURING THE WAR

SOURCES :

JAHRBUCHER DES REICHESVERBANDES DER DEUTSCHEN LANDWIRTSCHAFTLICHEN GENOSSENSCHAFTEN FÜR 1914, 1915, 1916, 1917 UND 1918 Years 21, 22 23 24, and 25 Berlin, 1915, 1916, 1917, 1918 and 1919.

In our issue of August 1920 we traced the general outlines of the co-operative movement in Germany during the war. In subsequent issues we dealt with the working of the co-operative credit societies, of the co-operative societies for purchase and sale and of the co-operative dairies during the same period. In this last article, to complete the study of the subject, we shall deal with that very considerable group of agricultural co-operative societies, varying in number and in character, usually denominated in statistics as miscellaneous co-operative societies. According to their importance in the economic life of the country we shall dwell at greater or less length on certain forms of these societies.

§ I. GENERAL DEVELOPMENT OF THE MISCELLANEOUS CO-OPERATIVE
SOCIETIES DURING THE WAR.

The miscellaneous agricultural co-operative societies aim at many different objects, relating to every branch of agriculture. The group includes vine-growers' societies, societies for the dessication of potatoes, for the breeding and sale of cattle, for the supply of electricity, for ploughing and threshing, and for the use in common of pasture-lands not to speak of other less important forms. Their development was considerable

during the five years preceding the war, for their number rose from 2,715 in 1910, to 2,973 in 1911; 3,360 in 1912; 3,844 in 1913, and 4,241 in 1914, giving an average increase of about 400 societies per annum. This rate of increase could not, of course, be maintained during the war period. In 1914-15, 169 new co-operative societies were formed, 61 of which arose in the two months of peace, June and July 1914, so that the new societies in the first year of the war were 108 in ten months, while the whole number dissolved was 66, 50 of these being in the months of war; the net increase was respectively 103 and 58 societies. In the second year of the war, the societies formed numbered 98, and the societies dissolved 65, making a net increase of 33 societies. In the third year we have the following figures: societies formed, 239; dissolved, 71; net increase 148. Finally, in the last year of the war, 1918, the number formed was 241, nearly the same as in preceding year, but the number dissolved rose to 93, so that there was an increase of 148.

The following table shows the number of these societies during the war years, as compared with the total number of agricultural co-operative societies:

Years	Total number of agricultural co-operative societies	Number of miscellaneous societies
1914	28,318	4,241
1915	28,555	4,342
1916	28,752	4,375
1917	29,082	4,543
1918	29,609	4,691

The total increase in the four years of war is thus 450 societies, slightly more than the average annual increase before the war. The greatest increase was in the third year, with 232 societies, of which 117 were societies for the supply of electricity, followed at a great distance, by the societies for the sale of cattle and threshing societies (17 each), societies for the use in common of pastures, horse breeding societies, societies for the sale of fruit, and societies for the sale of vegetables (10 each), societies for the dessication of potatoes (9), etc. In the second year of war the increase was lowest — 33 societies: in this year also the greatest increase was in the societies for the supply of electricity.

The miscellaneous co-operative societies represent about $\frac{1}{4}$ of the whole number of agricultural co-operative societies, and thus they exceed in number the single groups of co-operative societies for purchase and sale, and co-operative dairies, which as we have seen in preceding articles, form about $\frac{1}{4}$ of the total.

The miscellaneous co-operative societies were divided among the different States and territories of the Empire, during the war, in the following manner:—

TABLE I. — *Territorial Distribution of the Miscellaneous Co-operative Societies during the War Years.*

States and provinces	1914	1915	1916	1917	1918
Prussia:					
East Prussia	101	103	102	99	96
West Prussia	102	102	102	101	98
Brandenburg	177	187	190	205	226
Pomerania	572	577	601	677	724
Posen	188	192	191	184	184
Silesia	413	430	430	447	491
Saxony	221	234	240	246	248
Schleswig-Holstein	168	177	176	181	179
Hanover	461	479	478	490	500
Westphalia	153	160	162	169	177
Hesse-Nassau	87	87	86	91	96
Rhine Province	299	297	292	298	297
Hohenzollern	1	1	1	3	4
Total Prussia	2,943	3,023	3,051	3,191	3,320
Bavaria:					
Right bank of Rhine	513	517	513	522	533
Left bank of Rhine (Palatinate)	55	55	55	57	57
Total Bavaria	568	572	568	579	590
Saxony	89	100	100	100	80
Württemberg	84	84	85	84	86
Baden	87	91	91	95	96
Hesse	74	73	72	79	87
Mecklenburg-Schwerin	127	133	141	143	138
Mecklenburg-Strelitz	13	15	16	16	16
Saxe-Weimar-Eisenach	14	14	15	16	17
Oldenburg	109	106	106	106	107
Brunswick	34	32	32	33	32
Saxe-Meiningen	18	18	18	18	19
Saxe-Altenburg	8	8	8	8	7
Saxe-Coburg-Gotha	15	15	15	15	15
Anhalt	6	6	5	6	7
Schwarzburg-Sondershausen	4	4	4	4	4
Schwarzburg-Rudolstadt	9	11	11	12	12
Waldeck	6	6	6	6	6
Reuss (Elder Branch)	—	—	—	—	—
Reuss (Younger Branch)	—	—	—	—	—
Schaumburg-Lippe	5	5	5	5	5
Lippe	6	6	6	6	6
Lübeck	2	3	2	2	2
Bremen	2	2	3	3	3
Hamburg	2	2	1	1	1
Alsace-Lorraine	14	14	14	15	14
Total Germany	4,241	4,343	4,375	4,543	4,691
German colonies (1)	1	—	—	—	—
Foreign: Palestine (2)	2	2	2	—	—

(1) Co-operative Society for the Sale of Agricultural Produce in Karibib.

(2) "Wilhelm" Vine-growers' Union in Sarona Jaffa, and Jaffa Co-operative Mfll, formed by German colonists.

As shown in Table I, roughly three-fourths of the whole number of miscellaneous societies belonged to Prussia alone. Of the Prussian provinces, the greatest number of these societies belong to Pomerania, which had 572 in 1914, and 721 in 1918; Hanover with 461 and 500 respectively, and Silesia with 413 and 491, etc. The lowest number was in Hesse-Nassau, viz 87 and 96, except Hohenzollern which had only 1 and 4. Next to Prussia comes Bavaria, with 568 and 590 societies respectively, giving for 1914 figures very similar to those of Pomerania. Of the other States only two show more than 10 co-operative societies: Oldenburg, with 109 in 1914 and 107 in 1918, and Mecklenburg-Schwerin, with 127 and 138 respectively. The smallest number of these, and of all other co-operative societies, is in the free cities of Lübeck, Bremen, and Hamburg.

The miscellaneous co-operative societies adopt by preference limited liability and an always increasing proportion, as seen in Table II.

TABLE II. — *Form of Liability adopted by Miscellaneous Co-operative Societies.*

Unlimited liability			Limited liability		Unlimited liability to make supplementary payments	
Number	Percentage		Number	Percentage	Number	Percentage
1914	1,092	2.57	3,129	7.38	20	0.5
1915	1,104	2.54	3,219	7.41	20	0.5
1916	1,207	2.51	3,259	7.45	19	0.4
1917	1,094	2.41	3,430	7.55	14	0.4
1918	1,075	2.29	3,596	7.67	19	0.4

As will be seen, during the war period the number of societies with unlimited liability diminishes both absolutely and relatively, while that of the societies based on limited liability increases. About one fourth of all the co-operative societies have unlimited liability, and about three fourths have limited liability, a form more general in this group than among the co-operative societies for purchase and sale and the co-operative dairies already described. The third form, that of unlimited liability to make supplementary payments, is not so common.

§ 2. THE CAPITAL OF THE MISCELLANEOUS CO-OPERATIVE SOCIETIES.

The financial basis of the miscellaneous societies cannot be specified with such exactness as that of the three chief groups preceding, because the data are very incomplete, and refer to barely half of the existing societies. Nevertheless, in order to give an approximate idea of the capital

with which these societies work, we show in Table III (pages 6 and 7, the total working capital, the owned capital and the ratio of the owned capital to the total capital, for a number of these societies during the war.

As will be seen from Table III, all these types of co-operative societies obtain much of their working capital from outsiders. The owned capital was scarcely one fourth of the total capital during the last year of the war, and in preceding years it was still less. The highest percentage of owned capital was, in 1918, found amongst the co-operative sugar factories 77.6 per cent). But in the same year the co-operative societies for the removal of refuse, for the use in common of pasture lands, for storing grain, and for building were all much below the average of 25 per cent. And in many other cases, the amount of owned capital, especially that derived from the members' shares, is very low. The reserves also are often very small, because many of these co-operative societies are but recently formed. The data given above show among other things that considerable sums are invested in the miscellaneous co-operative societies. The necessary working capital is to a great extent placed at the disposal of these co-operative societies by central banks and by credit societies.

§ 3. THE WORK DONE BY SOME GROUPS OF SOCIETIES.

On the basis of the few available details, we give a short account of the work of the following types of co-operative societies :

Societies for the Supply of Electricity. — Co-operative societies for the supply of electricity are numerically the most important among the miscellaneous co-operative societies. Their increase during the war period was, as we have seen, greater than that for any other group of miscellaneous co-operative societies, especially during the second and third years of the war. The 610 societies for the supply of electricity, which in 1914 belonged to the National Federation, had 25,583 members, assets amounting to 35,784,769 marks, and liabilities of 35,116,159 marks. The aggregate profit was 668,610 marks. In 1918, 698 co-operative societies had 37,897 members, assets of 47,062,031 marks, and liabilities of 46,511,767 marks. Their aggregate profit was 550,264 marks, less than that of the last year before the war by 118,346 marks, although the number of societies had increased by 88.

Societies for the Joint Use of Machines. — Societies for the joint use of machines are often formed, not as independent societies, but in connection with other societies, such as rural banks, co-operative societies for purchase and sale, and Co-operative dairies. They are usually societies for ploughing, threshing and similar purposes. In 1914, 235 such societies belonging to the National Federation contained 4,347 members, possessed assets to the amount of 3,634,266 marks, had liabilities of 3,634,735 marks, and closed with a loss of 487 marks. In the year 1918, 241 societies for ploughing and threshing counted 5,468 members, with assets of 5,234,130 marks, and liabilities of 5,198,395 marks, and made 35,735 marks profit.

TABLE III. — *Total Working Capital and Owned*

Kind of Society	Number of societies for which supplied data	1914		Ratio of owned capital to total capital (percentage)	Number of societies which have supplied data	1915	
		Total working capital	Owned capital			Total working capital	Owned capital
Societies for the storage of grain	—	7,497,902	1,024,425	13.1	23	7,561,772	1,150,708
Military societies	—	2,007,800	498,366	24.3	16	2,679,096	683,610
Societies for distilling	—	5,425,167	2,723,979	50.9	120	5,192,152	2,032,063
Societies for the sale of spirit	—	—	—	—	—	—	—
Sugar factories	—	5,493,014	1,787,538	32.4	18	4,142,436	1,237,968
Sugar factories	—	—	—	—	—	—	—
Societies for the sale of fruit and vegetables	—	4,375,723	1,205,278	27.0	35	3,043,920	1,000,203
Societies for the destruction of pos- tulates	—	3,234,395	527,695	16.3	43	4,828,007	1,085,936
Vine-growers' societies	—	9,070,514	1,651,430	18.3	111	9,405,948	1,802,299
Live-stock breeding societies	—	583,035	308,119	63.1	121	1,091,751	341,613
Societies for the sale of live-stock	—	1,759,005	437,138	24.8	63	2,781,136	411,039
Societies for the breeding of poultry and sale of eggs	—	400,336	231,474	57.8	69	238,612	64,112
Societies for the supply of electricity	—	35,110,159	8,470,496	24.1	512	10,208,712	6,397,573
Ploughing and threshing societies	—	3,634,753	607,659	16.7	243	3,503,746	569,877
Water supply societies	—	1,480,695	156,467	10.6	113	950,343	208,444
Baking societies	—	3,119,710	1,225,756	39.3	36	9,074,931	1,509,126
Societies for the removal of refuse	—	—	—	—	—	—	—
Societies for the use of common or pasture land	—	3,072,625	422,156	13.7	89	3,725,893	510,829
Societies for the sale of horses	—	44,517	1,092	2.3	6	73,166	14,896
Meat societies	—	236,772	170,837	57.6	8	186,963	81,511
Brickmaking societies	—	—	—	—	—	—	—
Societies for the supply of acetylene gas	—	—	—	—	—	—	—
Societies for the manufacture of sawkerut	—	212,447	4,447	2.1	3	105,318	5,266
Total	—	86,753,131	22,185,954	24.0	1,051	100,657,909	22,377,205

MISCELLANEOUS AGRICULTURAL CO-OPERATIVE SOCIETIES

of the Miscellaneous Societies during the War (in Marks)

	1916				1917				1918			
	Total working capital	Owned capital	Ratio of owned capital to total capital (percentage)	Number of societies which have supplied ditto	Total working capital	Owned capital	Ratio of owned capital to total capital (percentage)	Number of societies which have supplied	Total working capital	Owned capital	Ratio of owned capital to total capital (percentage)	Number of societies which have supplied
23	8,908,133	1,201,600	13.1	6	8,873,017	1,377,173	15.5	6	12,602,204	1,677,118	13.3	
20	2,418,069	771,634	31.9	26	3,099,688	1,301,402	42.2	18	2,909,353	1,606,413	55.2	
95	6,076,590	2,261,104	37.2	96	6,044,708	2,068,294	34.2	60	4,511,194	1,981,481	43.9	
6	619,871	384,027	61.9	4	655,767	368,470	56.2	5	700,206	440,000	62.8	
11	5,138,936	1,587,390	30.9	12	5,724,380	2,000,213	35.0	9	5,345,851	1,087,103	20.3	
3	2,110,067	629,117	29.8	3	1,648,800	656,137	39.8	3	1,066,804	1,292,700	121.2	
45	3,884,913	1,408,830	36.3	37	3,190,007	1,240,534	39.2	30	4,070,336	1,671,006	40.8	
97	4,677,887	1,109,257	23.7	46	6,481,005	1,904,747	29.5	40	7,046,087	1,984,706	28.3	
100	8,808,605	1,801,177	20.4	70	5,800,407	1,696,790	29.3	112	19,300,000	3,647,421	18.9	
185	1,134,421	338,041	29.8	195	1,430,564	392,221	27.4	176	1,793,000	565,770	31.5	
84	2,113,010	645,496	30.5	134	11,231,639	1,458,009	13.0	100	7,433,230	2,809,148	37.8	
64	515,129	89,040	17.3	80	366,080	145,003	39.6	72	410,000	131,700	32.1	
531	39,462,599	7,726,885	19.5	599	42,028,844	8,688,602	20.7	650	40,449,684	10,842,973	26.8	
225	5,057,456	1,108,188	21.9	285	5,803,461	1,095,762	18.9	229	5,125,181	1,262,157	24.6	
113	1,612,330	242,306	15.0	119	1,627,179	235,295	14.5	118	1,593,016	254,794	16.0	
37	10,853,084	1,720,157	15.9	35	7,127,816	852,536	12.0	27	8,337,711	1,336,823	16.0	
5	94,620	31,544	33.3	—	—	—	—	4	136,490	17,006	12.5	
84	3,397,408	578,118	17.0	87	3,687,083	678,177	18.4	96	4,072,501	729,263	18.1	
4	46,225	10,214	22.1	—	—	—	—	4	20,405	8,834	43.3	
8	205,029	107,938	52.6	4	115,286	19,036	16.5	8	270,358	185,902	68.7	
7	883,143	316,631	35.9	13	1,780,476	546,700	30.7	4	483,298	230,183	47.6	
6	100,590	36,056	35.7	—	—	—	—	5	94,754	48,230	50.8	
1,708	108,159,141	24,106,757	22.3	1,851	116,818,950	27,381,616	23.4	1,817	135,602,308	33,935,595	25.0	

Vine-growers' Societies — The good vintages of 1915 and 1917, and the exceptionally high prices of wine, had in general a favourable effect on the co-operative vine-growers' societies. In these years the advantages of co-operative sale of wine were clearly perceived. More especially did the wives of vine-growers called to the colours find the benefit of co-operation. The 94 co-operative vine-growers' societies belonging to the National Federation in 1914 had 5,762 members; their assets were 9,068,936 marks, their liabilities 9,010,814 marks, their total profits 58 122 marks. In 1918, 115 co-operative societies had 7,060 members, assets of 20,371,136 marks, and liabilities of 19,523,005 marks; the net profit was therefore the considerable sum of 848,131 marks.

Societies for the Sale of Live Stock. — The number of co-operative societies for the sale of live stock formed during the war was highest in the provinces of Brandenburg and Hanover. In the Kingdom of Saxony in 1916 a central society was formed for the co-operative sale of live stock. The development of this form of society was generally much hindered by the societies of cattle-dealers. In 1914, 110 co-operative societies affiliated to the National Federation numbered 28,967 members, and showed assets of 1,811,867 marks, and liabilities of 1,749,005 marks, leaving profits of 52,862 marks. In 1918, 104 societies had 33,925 members, with assets of 8,574,027 marks and liabilities of 7,4332,36 marks; profits, 1,140,791 marks.

For other forms of co-operative societies, which are small and very numerous, it is difficult to give a clear summary of their progress.

§ 4. PROFITS AND LOSSES OF THE MISCELLANEOUS SOCIETIES.

The financial results of the miscellaneous societies were very varied, both for individual societies or for different groups. Table IV (page 9) shows the profits and losses of those co-operative societies which supplied particulars on the subject in 1914 and 1918.

From Table IV the fact may be deduced that in 1914 the co-operative societies for the storage of grain, for the sale of spirit, for the sale of eggs and poultry, for building, for the sale of honey, for the use in common of pasture land and for the manufacture of starch, were successful. They either made a profit, or kept their losses within strict limits. With the co-operative societies for the supply of electricity, the profits it is true, also exceed the losses, but only 184 societies show profits, while 273 show losses. In the same year, there was a prevalence of losses in the co-operative societies for the dessication of potatoes, for live stock breeding, for the use of motors and for water supply. The financial result is uncertain in co-operative milling societies, vine-growers' societies, societies for the sale of live stock and distilling societies because, though many made a profit, there were also in many cases considerable losses.

In 1918, the situation was somewhat different, the following changes having taken place. The vine-growers' societies and the societies for the

MISCELLANEOUS AGRICULTURAL CO-OPERATIVE SOCIETIES

TABLE IV. — *Profit and Losses of Miscellaneous Co-operative Societies in the Years 1914 and 1913 (in marks).*

Kind of society	1914				1913			
	Profits		Losses		Profits		Losses	
	Number co-operative societies	Amount	Number co-operative societies	Amount	Number co-operative societies	Amount	Number co-operative societies	Amount
Societies for the stor- age of grain . . .	10	196,276	8	12,060	23	504,866	2	79
Milling societies . .	11	47,432	4	33,753	9	125,000	4	38 215
Societies for the sale of spirit. . . .	4	38,681	—	—	5	41,513	—	—
Starch factories . .	9	105,220	1	4,018	5	25,487	4	24,754
Societies for the sale of eggs and poul- try.	61	16,248	13	5,709	60	25,518	12	1,024
Vine-growers' socie- ties	93	212,985	28	154,663	112	855,825	3	7,694
Societies for the sale of live stock . .	76	79,866	20	56,073	85	1,154,627	13	13,836
Building societies. .	30	119,544	5	6,620	19	60,599	9	40,326
Societies for the sale of honey . . .	44	3,570	—	—	3	1,537	11	47
Societies for the use in common of past- ure land. . . .	44	28,109	22	4,845	71	97,261	13	16,429
Societies for distill- ing.	67	109,215	12	34,209	37	132,587	16	48,718
Societies for the sup- ply of electricity	184	843,459	273	115,846	311	726,228	323	175,964
Societies for the des- tication of pot- atoes.	15	56,524	14	67,535	29	271,099	12	115,536
Livestock breeding societies	61	22,798	31	24,577	124	141,159	46	41,555
Societies for the joint use of mach- ines	121	92,314	81	94,291	127	184,260	92	148,525
Motor societies . .	66	1,124	7	51,589	4	1,857	3	33,472
Water supply socie- ties	49	14,470	28	14,798	52	11,612	39	26,685
Sugar factories . .	—	—	—	—	2	215 554	—	—
Societies for the re- moval of refuse. .	—	—	—	—	3	1,267	1	19,241
Societies for the sup- ply of acetylene .	—	—	—	—	2	149	2	6,554
Brick making socie- ties	—	—	—	—	1	443	3	4,740

sale of live stock can no longer be classed with societies of which the financial results are doubtful, but with those which have been successful. The starch factories and building societies together with the societies for the dessication of potatoes, for live stock breeding and for the joint use of machines, which had previously worked at a loss, must now be placed among those with doubtful results. The water supply societies and motor societies remain in the group showing unfavourable results, to which also belong the co-operative societies for brick making, for removing refuse, and for the supply of acetylene gas.

MISCELLANEOUS INFORMATION RELATING TO CO-OPERATION AND ASSOCIATION.

INTERNATIONAL QUESTIONS

THE INTERNATIONAL CONFERENCE OF AGRICULTURAL SYNDICATES HELD ON 16 AND 17 NOVEMBER 1920. — *Bulletin de l'Union Centrale des Syndicats des Agriculteurs de France*. Paris, December 1920

In our issue of December 1920, we noted briefly the International Conference of Agricultural Syndicates which had just been held at Paris. The *Bulletin de l'Union Centrale des Agriculteurs de France* gives the following information, which will serve to complete our previous note, on this important meeting.

It was on 8 July 1920, at the closing sitting of the 10th National Congress of the French Agricultural Syndicates, held at Paris, that the following resolution was passed on the motion of an Italian delegate, M. Russo.

"The 10th National Congress of Agricultural Syndicates decides to form an International Agricultural Syndicate, embracing the Federations of agricultural syndicates of the countries belonging to the League of Nations, instructs the Central Union of the Agricultural Syndicates of France to undertake the work of organization, and decides that a meeting of delegates from the federations in question shall be held for the purpose of establishing it during the first fortnight of November at the headquarters of the Central Union, 8 Rue d'Athènes, Paris."

This meeting took place on 16 and 17 November last. The following federations were represented: *Boerenbond Belge* (Canon Luytgaerens and M. Gijssen); *Confederación Nacional Católico-Agraria* of Spain (Professor Miguel Herrero Garcia); *Union Centrale des Syndicats des Agriculteurs de France* (MM. Delalande, Toussaint and Zirnheld); *Nederlandsche Boerenbond* of Holland (M. J. Th. Verheggen); *Irish Farmers' Union* (Mr. L. H. Kerney); *Federazione Nazionale delle Unioni Agricole*, of Italy (Sig. Mauri and Sig. Tovini, members of the Chamber of Deputies, Sig. Russo, Sig. Guar-

damagna and Sig. Zaccone); the Federation of Agricultural Associations of the Grand-Duchy of Luxembourg (MM. Kauffmann and Wirtgen); the Agricultural Federations of Poland (Count Lubieniski); *Associação central da agricultura portuguesa* (Senhor José Freire de Andradesé); *Union Suisse des paysans* (D^r Laur and M. Chavannes); the Czecho-slovak Catholic Farmers' Association (D^r Dvornik); the Agricultural Federation of Croatia (Professor Michel Ivsic) and the Rural Union of Slovenia (M. Kuhar Lojze).

The object of the conference was stated by M. Toussaint, general delegate of the *Union Centrale des Syndicats des Agriculteurs de France*, who said that the aim of its promoters had been, in the first place, to enable agriculturists to play in the international field a difficult game which had already begun. There had been formed industrial, commercial and labour international unions, which legitimately claimed to represent the interests of the various classes of workers in their relations with the International Labour Office at Geneva. They were also aware that a socialist International Federation of Agricultural Labourers had recently been formed at Amsterdam (1) and that this federation only proposed to defend the interests of a single class of agriculturist. Was it possible, in the presence of these various International Unions, to admit that the agricultural population in general should remain without an international organ, which would enable it at a given moment to make its powerful voice heard? They well knew that the questions which would shortly be submitted to the sittings of the Labour Conference were precisely those relating to the international organization of agricultural labour. To be heard by this International Office, two conditions were required. It was necessary, in the first place, that they should form occupational groups legally established. The second condition was that these groups should be composed of agriculturists, that is persons more or less closely bound to the land, from which they obtained their livelihood. They must be groups of men connected with the land, of all those, consequently, who possess, cultivate or work the land. Such were the reasons which induced the original promoters to speak of an international confederation, solely and exclusively trade-unionist in character, but at the same time agricultural in a wide sense. Another more distant object had also attracted their attention. It deserved to be pursued with the greatest energy. It was that of assuring the international independence, economic, financial and commercial, of agriculturists. What would the agriculturists do if they did not organize themselves in order to dispense, as far as possible, with the middleman and to obtain on better terms the fertilizers, seeds, implements and machines which they required and why should this organization, which had necessarily become national, not become one day also international? Most social and economic problems could now no longer be solved by a single country; their solution had almost always an influence, sometimes unsuspected, on neighbouring countries. Why then should they not conceive the pos-

(1) See our issue of December 1920, page 854.

sibility, for agriculturists who wished to have a part of their capital in a liquid form, of employing this money in supporting the rural institutions of neighbouring countries, instead of investing it to the advantage of foreign industrial, commercial or mining companies, of which they scarcely knew the name? Why should they not bring about an international understanding among the producers through the medium of the vocational federations, and why should not commercial agreements be concluded between the federations regarding the purchase or sale of agricultural produce, or economic agreements for mutual assistance in regard to labour or the exchange of services? A magnificent new field of action was thus opened up to the great vocational federations of the various countries who wished to assure their financial, economic and commercial independence.

The fundamental principles and rules of the International Confederation of Agricultural Syndicates were definitely adopted in the following form :

Character : (1) International understanding, not fusion ; (2) Confederation composed solely of Federations of Agricultural Syndicates (by 'syndicates' is understood vocational unions), mixed or not, of the different countries of the whole world, or failing such federations, federations effectively representing the vocational interests of agriculturists ; (3) A single federation per country, subject to exceptions made for special reasons.

Fundamental Basis : (1) It desires agreement between the classes and the progressive betterment of the lot of the agricultural population, in conformity with the principles of social justice and Christian brotherhood ; (2) It declares (a) that it recognizes the absolute independence of the national federations which compose it and that it respects the full and complete religious and political liberty of the members of those federations ; (b) it takes its stand on the defence of the vocational, moral, social and economic interests of agriculturists.

Aims and Means of Realising them. — Study and Action — such is its motto.

" (A) It will carry out the first part of the task which it has assumed, in particular :

" (a) By studying the problems relating to the moral, social and economic interests of agriculturists, to the international organization of agricultural labour, to labour legislation and conditions of labour ;

" (b) by collecting data relating to the condition of farmers in different countries ;

" (c) by publishing an organ containing information ;

" (d) by following the work of the various industrial, commercial and labour international vocational unions from the point of view of agricultural interests ;

" (e) by holding congresses at which questions interesting the agricultural profession shall be discussed.

" (B) It will carry out its vocational, moral, social and economic objects principally :

" (a) by developing the vocational organization of agriculture ;

" (b) by encouraging, in every possible manner, and particularly by means of scholarships, agricultural, social and technical studies ;

" (c) by urging the establishment of international regulations regarding emigration and immigration ;

" (d) by promoting financial, economic and commercial agreements between the different federations and interesting itself in questions relating to customs duties ;

" (e) by promoting the organization between them of the purchase, sale or exchange of agricultural produce or requisites for the cultivation of the land.

" (f) by encouraging the working of mines and factories by agricultural co-operative societies ;

" (g) by representing and defending international agricultural interests before all international institutions and organizations.

" *Assembly of Delegates and Committee* : (1) Composed of representatives of the affiliated federations and nominated by them to the number of two per nationality, freedom of choice and the determination of the length of time for which the nomination holds good being left to the national federations.

" (2) The assembly of delegates will elect a Committee composed of seven members. It will be renewable every two years.

" The execution of the decisions of the assembly of delegates will be carried out by the committee, which will appoint, if necessary, administrative or technical agents.

" (3) In all ordinary votes of the assembly of delegates, a bare majority will be sufficient.

" A majority of three fourths of the votes will be necessary in the case of an amendment to the rules.

" (4) Delegates who are prevented from attending the assembly may be represented by a delegate of the same nationality.

" *Execution of Resolutions* : The international organization being federal in character and respecting the absolute autonomy of the affiliated federations, the execution of resolutions which are not unanimously approved will not be obligatory for the national organizations.

" *Contributions* : (1) Entrance fee, the amount of which will be voluntarily determined by the affiliated federations, but shall not be less than 1,000 francs (French money) ; (2) variable contribution, to be fixed each year by the assembly of delegates.

The Conference instructed the Provisional Committee, which will remain in office until 31 March 1921 to negotiate with the agricultural federations of other countries with a view to bringing about the definite organization of the International Agricultural Syndicate.

The Provisional Committee is as follows : *President* : M. Delalande (France). *Members* : M. Mauri, Member of the Italian Chamber of Deputies (Italy) ; Count Lubinski (Poland) ; Canon Luytgaerens (Belgium) ; Professor Herrero (Spain) ; Dr Dvorine (Czecho-Slovakia). *General Secretary* : M. Toussaint (France).

ARGENTINA.

FORMATION OF A NEW AGRICULTURAL CO-OPERATIVE SOCIETY. — *Boletín de la Unión Panamericana*, March 1920.

At Buenos Aires an agricultural co-operative society has been formed with the title of *La Defensa del Chacabero*, for the purpose of protecting the interests of agriculturists. It proposes to construct depôts in agricultural centres, and at points of embarkation, for the storage of grain belonging to members and shareholders, to grant credit and loans on crops, to sell directly agricultural produce, and to furnish members with every kind of agricultural machine, and with bags, at the most moderate prices.

The society will also undertake fire and hail insurance, and will use every effort to obtain facilities from the railway companies for the carriage of agricultural produce.

CZECHOSLOVAKIA.

GERMAN AGRICULTURAL CO-OPERATION IN CZECHOSLOVAKIA IN 1920. — *Mitteilungen der deutschen Landwirtschaftsgesellschaft*, Stück, 52. Berlin, 25 December 1920.

The most important federation of German co-operative societies in that part of Czechoslovakia which is inhabited by Germans is the Federation of Bohemian Co-operative Societies, which embraces 692 Raiffeisen Banks, 30 co-operative grain stores, 2 co-operative societies for purchase and sale, 15 co-operative mills, 5 co-operative distilleries, 7 co-operative flax societies, 25 co-operative dairy societies, 3 co-operative societies for the disposal of live stock, 16 breeding societies, 20 co-operative grazing societies, 20 co-operative societies for threshing and the joint use of machinery, 5 societies for the production of electricity and 7 miscellaneous societies.

The Central Federation of German Co-operative Agricultural Societies of Moravia and Silesia has a somewhat more limited field of action, but the work which it carries on is all the more intense. The total business done amounted to 1,016,854,107 crowns in 1919. It embraces 306 Raiffeisen banks and rural banks, 38 co-operative societies for purchase and sale, co-operative grain stores and co-operative mills, 4 co-operative flax societies, 10 co-operative societies for the disposal of fruit and vegetables, co-operative distilleries and co-operative dessication societies, 25 co-operative dairies, 36 co-operative societies for the sale of milk, 39 breeding societies, 5 co-operative societies for the joint use of machinery and for threshing wheat, 24 co-operative societies for the production of electricity and 9 agricultural associations. In 1919 the first central co-operative society for the incubation of eggs was formed in Moravia, and in 1920 a co-operative spinning mill and a co-operative weaving mill for the manufacture of the flax produced by the farmers of Moravia. The Moravian Federation had in 1920 a staff of 88 employés.

The Federation of Agricultural Co-operative Societies of Silesia in-

cluded 128 Raiffeisen banks and rural banks, 12 co-operative societies for purchase and sale, co-operative grain stores and co-operative mills, 11 co-operative distilleries and co-operative societies for dessication, 1 co-operative society for the cultivation of flax, 9 co-operative dairy societies, 6 breeding societies, 5 co-operative societies for the joint use of machinery and for the threshing of wheat, 1 co-operative society for the production of electricity and 5 miscellaneous co-operative societies. The staff of this federation numbered 24 employés in 1920.

A further simplification of the German co-operative organization in the part of Czechoslovakia inhabited by Germans has taken place by the formation, on 6 February 1920, of the Confederation of German Agricultural Co-operative Federations, which was inscribed on the register of co-operative societies, as a society with limited liability, by the Commercial Court of Prague on 5 July 1920. This new body has as its objects the representation of common co-operative interests, the creation of appropriate conditions for the betterment of rural life, the simplification, development and perfecting of all matters relating to the administrative side of rural co-operation, the creation of the necessary conditions for the establishment of systems of co-operative instruction and of the training of the managing staffs of co-operative societies, the eventual revision of the whole co-operative organization and of the management of the affiliated bodies and contributing to all efforts for the improvement of agriculture and of rural production.

FRANCE.

THE TRAINING OF MANAGERS OF AGRICULTURAL SOCIETIES. — DECRET DE M LE SOUS-SECRÉTAIRE D'ÉTAT A L'AGRICULTURE EN DATE DU 6 AOÛT 1920, CRÉANT A L'INSTITUT NATIONAL AGRONOMIQUE UNE SECTION D'APPLICATION DE LA MUTUALITÉ ET DE LA COOPÉRATION AGRICOLE. *Journal Officiel*, Paris, 8 April 1920.

On 15 October 1920, a section was opened at the National Agricultural Institute, for the application of mutual insurance and agricultural co-operation, for training directors of agricultural syndicates, of credit and insurance societies and of co-operative agricultural societies.

This section will receive each year, up to the number of 20, pupils holding certificates from the National Agricultural Institute and the national schools of agriculture, nominated by ministerial decree, half the number of vacancies being as a rule granted to candidates of each class.

The duration of the course is fixed at five months. The instruction will be given from 15 October to 31 December at the National Agricultural Institute, and also at the Musée Social: from 1 January following to 15 March, in institutions of mutual insurance, credit, and agricultural co-operation, both in Paris and the provinces. The programme of study includes lessons, their application, exercises or practical work, periods of unpaid employment, and excursions.

GERMANY.

CO-OPERATION IN THE USE OF AGRICULTURAL MACHINERY. — BUSSEN (Franz), General Secretary of the Agricultural Co-operative Federation of Hanover: *Die genossenschaftliche Benutzung landwirtschaftlicher Maschinen und Geräte*. Berlin, 1919.

We reproduce from the book above mentioned, which is the 24th volume of the German Agricultural Co-operative Library (*Deutsche landwirtschaftliche Genossenschaftsbibliothek*) the following table showing the number of co-operative societies for the use of agricultural machinery and implements in the various states and provinces of Germany on 1 January 1919.

States and Provinces	Co-operative societies for the use of threshing machines	Co-operative societies for motor ploughing
East Prussia	6	4
West Prussia	14	2
Brandenburg	19	9
Pomerania	18	5
Posen	10	4
Silesia	24	29
Saxony	37	10
Schleswig-Holstein	32	1
Hanover	42	2
Westphalia	3	—
Hesse-Nassau	22	—
Rhine province	20	—
<i>Prussia</i>	247	66
Bavaria	235	3
Saxony	8	—
Württemberg	14	—
Baden	10	—
Hesse	32	—
Saxe-Weimar	12	—
Mecklenburg-Strelitz	2	—
Oldenburg	3	—
Brunswick	11	—
Saxe-Meiningen	9	—
Coburg-Gotha	3	—
Anhalt		
Schwarzburg-Rudolfstadt	5	
Waldeck	2	
Schaumburg-Lippe	2	
Alsace-Lorraine	1	
<i>Total</i>	598	69

On 1 January 1919, therefore, there were 667 co-operative societies for the use of agricultural machinery, of which 313, or nearly half, were in Prussia.

POLAND

AGRICULTURAL CO-OPERATIVE SOCIETIES IN POSEN. — PERNOT (Maurice): L'épreuve de la Pologne, in the *Revue des deux Mondes*, Paris, 15 October 1920.

In Posen the basis of the agricultural system is the medium-sized holding. In the Grand Duchy, the holdings are usually from 20 to 50 hectares in extent. The peasant of Posen is educated; not only does he understand his work, but in clubs organized by the clergy he has received a certain social and economic training. Enriched by the war he sometimes purchases land, but usually he takes his money to the bank; the agricultural labourer in Posen appreciates the advantages of large scale cultivation, and generally prefers his own position to that of the owner of a very small holding.

M. Maurice Pernot divides the rural population of Posen into three classes; the small peasant proprietors who are few in number; rather more than 20,000 farmers, who have succeeded to the German colonists, receive a grant of land and pay arrears in money; then the agricultural labourers, who form the most numerous class.

These last are paid by the year; their wages are partly in money, partly in kind; they are lodged gratuitously, have the use of a garden and of a piece of arable land, and the right of feeding two cows on the pastures of the farm. Families of agricultural labourers are often found to have been settled on a farm for sixty years. The combined efforts of the proprietors, who are all good agriculturists, and of the labourers who apply with docility and intelligence the most modern systems, have extracted abundant and varied produce from the soil.

The merit of this development must be attributed to the agricultural co-operative societies. These organizations were sanctioned by the German government, and the clergy of Posen grouped into parallel associations the working men of the towns and those of the country. The co-operative societies not only offered the peasants of Posen a means of social and moral training, evening schools, lectures, and newspapers, but also organizations of economic progress, banks, rural credit societies and societies for joint purchase and sale.

The Central Federation of Agricultural Co-operative Societies (*Zentral Rolnikow*) is a joint-stock company with a capital of six million marks. By its intervention co-operative societies enter into relations with the national and world markets; all commercial transactions come within its scope; it is in a word, the intermediary between production on the one hand, and consumption and exportation on the other.

The Central Society for the Supply of Agricultural Machines (*Zentrala Muszyn*) supplies to the societies the machinery and implements required in farming.

The co-operative societies themselves, to the number of 350, are thus divided : 200 co-operative credit societies (*Bank Ludowy*: loans on securities and mortgages, deposits, etc.): 70 agricultural co-operative societies for the joint purchase of requisites, tools, clothing and provisions, and the joint sale of produce: 20 " co-operative colonization societies " (*Spolezsky-Ziemskie*; joint purchase of land to be re-sold or let in plots to peasants) : lastly some associations for the purpose of administering premises devoted to evening lessons and lectures, printing establishments and shops. All these co-operative societies are federated and connected with the Central Society, of which M. Adamski is President. Lastly this Society has founded and administered a Central Bank (*Bank-Zwiaskowolacz*: Bank of the Union of Co-operative Societies) which is now the largest credit institution in all Poland. It is a joint-stock company with a capital of 200 million marks, plus 70 millions as a reserve: its deposits amount to more than 1,000 millions. To members of co-operative societies it pays from 2 to 5 per cent. interest on deposits, and grants loans at rates varying from 4 $\frac{1}{2}$ to 7 per cent.; it is also open to the public for all kinds of banking transactions. We may add that besides the thousand millions on deposit in the Central Bank there are 900 millions of deposits received by the Co-operative Credit Societies (*Bank Ludowy*).

PORTUGAL.

CONVERSION OF THE CENTRAL ASSOCIATION OF PORTUGUESE AGRICULTURE INTO THE CENTRAL UNION OF PORTUGUESE AGRICULTURISTS. Decreto No. 5, 219, *Diario do Governo*, Lisbon, 8 March 1919. — Decreto No. 7,032, *Diario do Governo*, Lisbon, 16 October 1920.

In the Decree of 8 January 1919, No. 5219, by which sanction was given to a complete set of regulations relating to agricultural credit and agricultural associations in Portugal, the formation of a Central Union of Portuguese Agriculturists was already contemplated, and, in Art. 713 of the decree, it was declared that such a Union could be constituted in Portugal only on the condition that it embraced the greater number of the district and regional unions of continental Portugal or, failing this, the greater number of the syndicates and agricultural associations of every continental region. According to the same article, if such a union could not be constituted, its place was to be taken by the present Central Association of Portuguese Agriculture, which also might be definitely converted into a Central Union of Portuguese Agriculturists.

On the basis of these provisions and of Decree No. 1,099, which authorizes the Government to take all measures rendered necessary by the economic conditions of the country, a new Decree (No. 7,032) was issued on 15 October. This decree, with the object of centralizing all the agricultural associations of Portugal in a single body, lays down that the existing Central Association of Agriculture, which has all the qualities required by the previous decree, having been for many years the most important association in Portugal in respect of the number of agricultural syndicates

affiliated to it, should be transformed into the Central Union of Portuguese Agriculturists.

According to Art. 713 of the previous decree, agricultural syndicates, agricultural associations, teachers of agriculture or of any branch subsidiary to agriculture, those who hold certificates from any agricultural teaching institution, and those who, though without a certificate, have shown themselves competent in subjects directly connected with agriculture and stock-farming, may become members of this association. The new decree adds another category of individual members, viz. agriculturists or owners of agricultural land already belonging to the Central Association of Portuguese Agriculture.

Special privileges are granted to collective bodies admitted to membership. Federations, syndicates, agricultural associations, and co-operative societies to which no mutual agricultural credit bank is attached provided that they are members of the Central Association of Portuguese Agriculture, are exempt, like the association itself, from all payment of contributions and have the right of free postage, as established by the Law of 1 March 1911, art. 33. They also have facilities for the carriage of goods, and privileges for the transport of manures, seeds, agricultural machines and all other imported agricultural goods.

To intensify and extend the work of the association, the decree provides that it may organize three annual fairs, one in the south, one in the centre, and one in the north of Portugal, to which the Government will contribute a subsidy of \$5,000 for each.

Should the Government desire to import directly agricultural produce of any kind, it will entrust the distribution of such produce to the Central Association of Agriculture, which will avail itself of the help of syndicates, co-operative societies, and other agricultural institutions connected with it. Agricultural syndicates belonging to the association have the right to act as co-operative distributive societies, or to open shops to supply necessities to their members and the agricultural population.

The commission due to agricultural syndicates for purchases, sales and carriage on the behalf of the members will be according to the Law of 23 September 1920 (No. 6,964) four per cent.

Part II: Insurance and Thrift

SWITZERLAND.

LIVE STOCK AND HAIL INSURANCE IN 1918.

SOURCE (OFFICIAL) :

RAPPORT DU BUREAU FÉDÉRAL DES ASSURANCES SUR LES ENTREPRISES PRIVÉES EN MATIÈRE D'ASSURANCES EN SUISSE EN 1918. Publié conformément à la décision du Conseil fédéral suisse du 11 octobre 1920. 33^e année. Berne, A. Francke, 1920.

§ 1. LIVE STOCK INSURANCE.

Conditions of Working. — Live stock insurance embraces, speaking broadly, the private undertaking which carry on this branch of insurance, the preventive measures taken by the State to combat diseases of live stock, and the complementary action of the local insurance societies, scattered throughout the country.

It should be noted, however, that the public bodies which take steps to combat diseases of live stock can only be considered insurance institutions in a very broad sense. In fact the money employed in combating disease is not furnished by the contributions of the stock-owners, but is supplied out of the public funds. Moreover, such money is employed rather in preventive measures than in compensating the owners of animals which have died from disease.

In view of these special measures, and even more because of the compensation paid for animals slaughtered, the risks to be covered by live stock insurance properly so-called are much diminished, since it is only necessary to cover the losses resulting from ordinary diseases or from accident.

The task of the undertakings which carry on live stock insurance is greatly facilitated by the action of the State in granting to insured persons official subsidies towards the payment for premiums. By means of these, the Swiss Confederation aids the cantons which have introduced compulsory insurance for a defined area—commune, district or canton—and which support or supervise this class of insurance (Art. 13 of the Federal Law of 22 December 1893 on the improvement of agriculture by the Confederation).

Until the beginning of the War, federal subsidies could be given up to the amount of the cantonal subsidies. The Decree of the Federal Council of 30 October 1914 limited, as from that day, the sum granted by the Confederation to a fixed sum per head of stock, namely 1 franc per head of cattle and 40 centimes per head of small stock insured. The consequence of this measure of economy was that the subsidies granted to the 17 cantons concerned — Lucerne, Schwyz, Obwalden, Nidwalden, Zug, Appenzell I-Rh Int. and St. Gall are not included — were reduced by about one fifth, a diminution scarcely felt by the insured persons.

In the following table we give statistics taken from the Reports of the Federal Department of Public Economy, of the subsidies granted for live stock insurance in the years 1912 to 1918.

TABLE I. — *Subsidies granted for Live Stock Insurance in Switzerland.*

Years	Number of head of stock insured	Subsidies			
		Cantonal		Federal	
		Total amount	Amount per head of stock	Total amount	Amount per head of stock
		Fr.	Fr.	Fr.	Fr.
1912 . . .	824,639	988,797	1.20	988,797	1.20
1913 . . .	873,033	1,084,043	1.24	1,084,043	1.24
1914 . . .	916,909	1,104,032	1.20	1,004,684	0.95
1915 . . .	834,067	1,021,870	1.23	791,347	0.95
1916 . . .	857,700	1,037,938	1.21	815,389	0.95
1917 . . .	851,787	1,060,322	1.24	810,728	0.95
1918 . . .	836,856	1,048,825	1.25	797,524	0.95

In spite of these liberal subsidies the societies, of which the operations are restricted to a limited local field, were not able completely to satisfy the need of insurance. The cause is to be found in the excessive multiplication of these societies, which prevents a rational distribution of the risks and, above all, the formation of sufficient financial guarantees.

These defects often outweigh the advantages which the local associations offer, such as the much simplified management and the ease of supervising the insured persons. The local societies were often compelled to leave too high a proportion of the risk to be covered by the stockowners themselves, without being able at the same time to dispense with the faculty of reducing the compensation paid when losses were heavy; in these circumstances, the value of the insurance offered was considerably diminished.

At this point the private companies step in; by reason of their wide field of operations, their larger volume of insurance business, and the bigger reserves at their disposal, they are in a position to guarantee much better the covering of the risks, even for valuable animals, such as pure bred horses and cattle.

The Companies under Federal Supervision. — Three mutual insurance

companies, the *Mutuelle Chevaline Suisse*, of Lausanne, the *Badische Pferdeversicherungsanstalt* of Karlsruhe, and the *Garantie Fédérale*, of Paris, and one share company, the *Perleberger Versicherungs-Aktien-Gesellschaft* of Perleberg in Prussia, were authorized, as in previous years, to carry on the business of live stock insurance in Switzerland in 1918.

In face of so serious a risk, the companies in question are obliged, although they have ample means at their disposal, to interest the owner of the stock insured in the good treatment and care of the animals. This result is attained in practice by making each stockowner remain his own insurer for a part (20 to 25 %) of the value insured. However the Perleberg company covers the whole value of the animal in the case of thoroughbred or halfbred horses, racehorses and butcher's beasts.

Besides the restriction of which we have spoken the two mutual insurance companies of Lausanne and Karlsruhe reserve the right to levy from their members, in case of necessity, a supplementary premium. The *Mutuelle Chevaline Suisse* has only once (in 1913) been compelled to have recourse to this step, while for twenty years the *Badische Pferdeversicherungsanstalt* u. G. has not made use of this power.

The *Garantie Fédérale* and the *Perleberger Versicherungs-Aktien-Gesellschaft* only accept insurance at fixed premiums. But the persons insured in the French society, though free from liability to pay supplementary premiums, are liable to have the compensation reduced. Thus in place of giving to insured persons in its Swiss section the compensation of 80 per cent. of the estimated value contemplated by its rules, it has given the following percentages :

	1913	1914	1915	1916	1917	1918
	%	%	%	%	%	%
Horses	52	56	60	60	68	72
Cattle.	54.4	60	80	80	80	80

Only in 1919 was the full 80 % compensation given in the case of horses. The company, however, hopes to be able in the future to maintain more regularly the rate laid down by the rules. It counts upon obtaining this result by means of a tariff fixed with greater care and of premiums duly increased.

As regards the financial results of the year, the four companies present reports which are generally speaking satisfactory. The volume of business done by the two German companies and by the Swiss company has notably increased.

The influence exercised by the War is clearly shown in the figures relating to the Swiss business of the four companies authorized to carry on live stock insurance in Switzerland. To observe this influence, it is sufficient to glance at the following table, which contains the figures relating to this branch of insurance in Switzerland for the war years and for the years 1912 and 1913.

TABLE II. - *Development of Live Stock Insurance in Switzerland from 1912 to 1918.*

Years	Sums assured during the year Fr.	Premiums received Fr.	Losses	
			Amount Fr.	Percentage of premiums Fr.
1912	17,398,977	635,972	482,214	75.8
1913	18,678,708	632,932	541,145	84.8
1914	20,371,340	604,394	486,023	79.9
1915	13,946,032	573,403 (1)	481,580	92.7
1916	12,932,894	520,386	388,816	74.7
1917	13,900,032	496,107	366,752	73.9
1918	23,411,116	718,505	444,718	61.9

(1) Including supplementary premiums amounting to 57,750 francs.

The enormous increase in 1918 of the sums assured is noteworthy. This increase is due, in great part, to the resumption by the Perleberger Company of the insurance of cattle and sheep (6,849,875 francs). This form of insurance has also contributed to the extent of 94,774 francs to the increase of the premiums received, and the compensation paid being small (39,334 francs) it helped to improve the percentage of the losses in relation to the premiums.

In the insurance of horses, the sums insured increased by 2,661,209 frs., reaching the sum of 16,561,241 francs, which, however, does not yet equal the pre-War figure. In 1918 12,931 animals were insured, as compared with 12,869 in 1917; the mean risk per head increased from 1,080 francs to 1,281 francs. The premiums received showed an increase of 127,624 frs., whereas the losses only increased by 38,632 francs, so that the proportion between the losses and the premiums diminished from 73.9 to 65.0 per cent. This improvement is mainly due to the increase in the prices obtained for the carcasses; early slaughtering is also very important. It is, therefore, to the interests of insured persons to notify the company immediately a case of illness occurs amongst the live stock belonging to them.

§ 2. INSURANCE AGAINST HAIL.

Conditions of Working. — In view of the precarious conditions attending the settlement of losses, hail insurance has also need of State aid. In Switzerland the provisions of Art. 13 of the Federal Law of 22 December 1893 on the improvement of agriculture by the Confederation, apply to hail insurance, as they do to live stock insurance. Federal subsidies are only granted when cantonal subsidies have previously been granted. At the present time 21 cantons grant such subsidies; in addition to the payment of the expenses of taking out the policy, they amount to from 10 to 30 per cent. of the premiums. Until 1914 the Confederation paid subsidies up to the amount of the subsidies granted by the cantons. The Federal Decree of 11 December 1914 reduced the federal contribution to

50 per cent. of the expense of taking out the policy, 20 per cent. of the insurance premiums for vines and 12 ½ per cent. of the premiums for other crops. As a result of this measure, the federal subsidies were reduced to about nine tenths of those given by the cantons.

The following table, compiled with data extracted from the Reports of the Federal Department of Public Economy, shows the development of the subsidized hail insurance. It indicates also the amount of the subsidies granted during the seven years 1912 to 1918 by the cantons on the one hand and the Confederation on the other.

TABLE III. -- *Subsidies Granted for Hail Insurance in Switzerland from 1912 to 1918.*

Years	Subsidized insurance		Subsidies paid	
	Number of policies	Sums assured Fr.	By the Cantons Fr.	By the Confederation Fr.
1912	65,421	80,495,107	261,396	261,396
1913	63,408	71,791,081	216,660	216,660
1914	66,661	81,356,404	261,458	261,458
1915	68,829	91,014,971	248,279	225,396
1916	73,104	107,984,053	284,896	258,688
1917	79,894	142 117,917	358,544	325,487
1918	88,739	206,476,184	514,765	481,480

The enormous increase in the value of the agricultural produce insured is very striking. While the number of policies only increased by 40 per cent. between 1913 and 1918, the sums assured have almost trebled in the same period. The mean value assured per policy, which was 1,132 frs. in 1913, rose to 2,327 francs in 1918. The increase is attributable in the main to the insurance of cereals and is a result not only of the increase in price but also of the larger areas sown to cereals in comparison with previous years. The crop of which the cultivation showed the largest proportionate increase was maize. It has been seen to be necessary to insure even the potato crops and the sums assured in respect of this crop have more than trebled in recent years. The same may be said of vegetables. The value of the fruit and vines insured has also considerably increased. The sums assured in respect of permanent grass-lands have increased by 50 per cent.

Results of the Working of the Swiss Hail Insurance Societies. -- Insurance against hail has been carried on in Switzerland for many years by two mutual insurance companies, the *Société suisse d'assurance contre la grêle*, of Zurich, and *Le Paragrêle*, of Neuchâtel. The latter only does business in the Canton of Neuchâtel and only insures vines. The former, on the other hand, operates in the whole territory of the Confederation and insures every kind of produce against damage by hail; it now insures the crops even of the Canton of Ticino, after having long hesitated to do so on

account of the heavy risk of hail in all the Swiss territory south of St. Gotthard.

For both the societies mentioned, the results of their operations in 1918 were very satisfactory. The success is all the more gratifying inasmuch as in the previous year the hailstorms has been frequent and had caused much damage; the *Société suisse d'assurance contre la grêle* had, in fact, in 1917 to pay compensation in so large a number of cases that it was obliged to draw upon its reserve fund to the extent of 846,226 francs, and as this was not sufficient to cover the claims it had to raise a supplementary levy equal to 30 per cent. of the premiums, which brought in 625,245 francs. The losses of 1917 were in great part recouped in 1918.

The business done in 1918 greatly exceeded all anticipations and the turn-over showed a considerable increase; on the other hand the number of hailstorms was far smaller and the damage done considerably less than in previous years. This being so, large sums remained to be allocated to the reserve.

The following table contains the principal figures relating to the development of hail insurance in the years 1912 to 1918.

TABLE IV. — *Results of Hail Insurance in Switzerland
from 1912 to 1918.*

Years	Number of policies	Sums assured	Premiums received	Compensation paid	Reserve fund
—	—	Fr.	Fr.	Fr.	Fr.
1912 . .	65,965	80,519,347	1,393,591	654,627	3,758,016
1913 . .	63,978	71,772,796	1,107,435	902,053	3,899,260
1914 . .	67,432	81,425,914	1,337,817	531,123	4,683,494
1915 . .	69,405	91,038,111	1,332,103	1,392,798	4,599,572
1916 . .	72,493	108,004,123	1,595,189	1,342,359	4,827,274
1917 . .	80,970	143,138,861	2,745,681	3,443,614	3,985,647
1918 . .	91,464	209,246,632	3,389,121	424,574	6,642,983

Part III: Credit

MISCELLANEOUS INFORMATION RELATING TO CREDIT

ARGENTINA

1. ESTABLISHMENT OF A NEW CREDIT INSTITUTION " BANCO PRODUCTOR, ARGENTINO " — *Revista de Economía y Finanzas* Buenos Aires, 20 November 1920.

A new credit institution has been established in Argentina, with the name of *Banco Productor Argentino*, which is intended to develop credit by means of a special form of the sale of cultivated lands.

The Bank will, in fact, acquire in various localities large areas of land, which it will divide into small parcels, for the formation of farms or plantations or the cultivation of special crops. These parcels will be sold by the Bank, the purchase price being payable by instalments, to be agreed in each case, within a fixed period, at the end of which the parcel will become the property of the purchaser.

As regards the agricultural holdings, they will be supplied with all the equipment necessary for their working — wells, stock, plants, seeds, machines, etc., — which will be consigned to the farmer who makes application for them on conditions laid down by the Bank.

Payment for the equipment purchased will be made by the farmer by assigning part of the produce of the farm to the central departmental farm, which will credit the farmer with the value of the produce in a current account opened between the farmer and the central departmental farm.

The lands on which the Bank will form plantations will be devoted exclusively to the cultivation of fruit trees or of olive trees, and to the utilization or industrial transformation of the fruit.

The sale of the parcels into which the lands acquired by the Bank will be divided will always be made with the express obligation that they shall be handed to the purchasers, within the period laid down, in complete working order, the Bank undertaking to cultivate and to manage them, even during a subsequent period, in order to facilitate the purchasers in working them.

The Bank will not only give to its shareholders or clients personal

credit, but will assist them in the purchase of the requisites of which they may have need for their farming operations.

The Bank will employ part of its assets in loans at 10 per cent. or at 5 per cent., repayable by quarterly instalments, to small producers and manufacturers.

* * *

2 THE "BANQUE HYPOTHÉCAIRE FRANCO-ARGENTINE" IN 1920. — RAPPORT DU CONSEIL D'ADMINISTRATION À L'ASSEMBLÉE GÉNÉRALE ORDINAIRE DE 10 DÉCEMBRE 1920. Paris, 1920.

The economic and financial position of the Argentine Republic in the course of the year 1919-1920 had not changed sufficiently to allow mortgage companies to resume their normal business. The wealth which its agriculture and stock farming brought to the country in 1919 was considerable; in consequence mortgage loans were continually reimbursed, and the succeeding transactions were unimportant.

With regard to the Franco-Argentine Mortgage Bank in particular, its mortgage loans amounted on 30 June 1919, to 127,365,901.80 fr. During the working year 1919-1920, twenty-two applications for loans, amounting nominally to 16,645,825 francs were considered; twelve of these, representing 7,712,825 francs, were refused; ten new loans were granted for 8,933,000 francs. On the other hand, the repayments made when they became due or in advance amounted to 41,545,073.95 fr.

The loans outstanding on 30 June amounted to 89,131,827.85 frs., of which 3,814,166.95 frs. were lent on the security of property which had been purchased by third parties who were taking steps to liquidate the debt.

This total loans outstanding may be thus divided:

Urban loans.	8,888,600.00 francs
Rural loans	80,243,227.85 »
Total . . .	89,131,827.85 »

The rural loans therefore represent 90 per cent of the whole amount of loans outstanding.

GREAT BRITAIN AND IRELAND.

LAND PURCHASE CREDIT IN IRELAND IN 1918-19. — REPORT OF THE IRISH LAND COMMISSIONERS FOR THE PERIOD FROM 1ST APRIL 1918 TO 31ST MARCH 1919. Dublin, 1920.
— REPORT OF THE ESTATE'S COMMISSIONERS FOR THE YEAR 1ST APRIL 1918 TO 31ST MARCH 1919. Dublin, 1919.

The following tables contain detailed statistics relating to land purchase credit in Ireland for the year 1918-19, together with summarized statistics up to 31 March 1919. Detailed statistics up to 31 March 1919 were given in our issue of November-December 1919. For an account of the differ-

ent systems under which States credit is, or has been granted in Ireland for the acquisition of land, we refer the reader to previous articles on the subject (1).

TABLE I. — *Sales between Landlord and Tenant in the Year ending 31 March 1919.*

	Numb- er of loans	Numb- er of estates	Area	Rent (of tenant- ed land only)	Purchase price	Amount of advances	No. of years' purchase of rent (tenanted land only)
			Acres	£	£	£	
Direct Sales:							
Under the Act of 1909 (Advances by Land Commissioners,	6	3	42	2	195	195	—
Under the Act of 1903 (Advances by Estates Commissioners	5,224	181	166,073	81,316	1,829,096	1,801,073	22.1
Under the Act of 1909 (Advances by Estates Commissioners	861	82	28,031	10,226	211,069	206,002	20.4
Total Direct Sales . . .	6,091	266	194,146	91,550	2,040,362	2,007,270	—
Sales in the Land Judge's Court:							
Under Act of 1903 (Direct Sales)	3	2	35	11	170	170	15.3
Under Act of 1909 (Direct Sales)	4	2	134	57	1,251	1,251	21.7
Total Sales in Land Judge's Court.	7	4	169	68	1,421	1,421	—
Redemption of Rent:							
Under Act of 1909 . . .	1	1	77	172	3,800	2,500	22.0
Total Sales between Land- lord and Tenant . . .	6,099	271	194,392	91,790	2,045,583	2,011,191	—

(1) Issues of October 1911, June 1913 and May 1918.

The aggregate figures relating to the year 1918-19 and for the period up to 31 March 1919 are given in two different ways. In Tables V and VII, the figures relating to estates purchased for re-sale to tenants have been added to those showing the sales which have taken place between landlord and tenant. This gives the total figures of all advances made for the purchase of land. In Tables VI and VIII we add the figures show-

TABLE II. — *Estates Purchased during the Year ended 31 March 1919 for Re-sale to Tenants.*

	Estimated number of purchasers on re-sale	Number of estates	Area	Purchase price	Amount of Advances
			Acres	£	£
Estates purchased by the Estates Commissioners:					
Direct from landlords under Act of 1903	134	12	4,034	43,684	43,459
Direct from landlords under Act of 1909	74	10	2,774	28,477	28,315
In Land Judge's Court under Act of 1909	26	1	348	3,090	3,090
By "final offer" under Act of 1909	1	1	53	414	414
Total estates purchased by Estates Commissioners	235	24	7,209	75,665	75,278
Estates purchased by the Congested Districts Board:					
Under Secs. 72 and 79 of Act of 1903	30	2	1,713	5,778	5,778
Under Secs. 72 and 79 of Act of 1903 and under Act of 1909	1,047	23	37,570	161,670	161,670
By "final offer" under Act of 1909	1,431	16	42,249	214,599	214,599
By compulsory purchase under Act of 1909	47	1	920	4,700	4,700
Total estates purchased by Congested Districts Board	2,555	42	82,452	386,747	386,747
Total estates purchased	2,790	66	89,661	462,412	462,025

TABLE III. — *Re-sales during the Year ended 31 March 1919
of Estates Purchased.*

	Number of loans	Area	Rent (of tenanted land only)	Purchase price	Amount of advances	Number of years' purchase of rent (tenanted land only)
Re-sale of estates purchased by the Estates Commissioners .			£	£	£	
Under the Act of 1903	1,231	27,091	6,109	267,940	285,130	28.0
Under the Act of 1909	174	5,356	839	67,809	66,752	18.2
Total re-sales of estates purchas- ed by the Estates Commis- sioners	1,405	32,447	6,948	355,749	351,882	—
Re-sales of holdings on estates purchased by the Congested Districts Board:						
Estates re-sold under the Act of 1903 (Advances by Land Commissioners,	663	14,525	4,789	111,455	111,355	23.3
Re-sales of estates purchased under the Act of 1903 (Advances by Estates Com- missioners)	145	5,538	2,002	49,293	49,293	24.1
Re-sale of estates purchased under the Act of 1909 (Advances by Estates Com- missioners).	163	5,515	1,825	40,890	40,890	21.1
Re-sale of estates purchased partly under the Act of 1903 and partly under the Act of 1909 (Advances by Estates Commissioners) . . .	7	217	108	2,673	2,673	24.7
Total re-sales of holdings on estates purchased by the Congested Districts Board .	978	25,849	8,724	204,111	204,211	—
Re-sales of demesnes on estates purchased by the Congested Districts Board.	4	1,626	—	12,942	12,942	—
Total re-sales.	2,387	59,922	15,672	572,802	569,035	—

TABLE IV. - *Re-sales of Demesnes during the Year ended 31 March 1919.*

	Number of loans	Area	Purchase price	Amount of advances
		Acres	£	£
On estates in which sales have taken place between landlord and tenant under the Act of 1903 (Advances by Estates Commissioners) (1)	7	1,620	24,744	19,613
On estates purchased by the Estates Commissioners:				
Under the Act of 1903 (2)	1	273	975	975
Under the Act of 1909 (2)	2	450	5,375	5,361
On estates purchased by the Congested Districts Board and re-sold under the Act of 1909 . . .	4	1,626	12,942	12,942
Total re-sales of demesnes	14	3,969	44,036	38,891

(1) Included in figures given in Table I for direct sales under the Act of 1903 (Advances by Estates Commissioners). — (2) Included in figures given in Table III for re-sales of estates purchased by the Estates Commissioners.

TABLE V. — *Advances made during the Year ended 31 March 1919 for purposes of Land Purchase.*

	Number of loans (1)	Number of estates	Area	Purchase price	Amount of advances
			Acres	£	£
Sales between landlord and tenant	6,099	271	194,392	2,045,583	2,011,191
Estates purchased for re-sale to tenants (2) 2,790		66	89,661	462,412	462,025
All advances made for purposes of land purchase (2) 8,889		337	284,053	2,507,995	2,473,216

(1) In the case of estates purchased, the number of loans is the estimated number of purchasers to whom advances will be made on re-sale — (2) Not including estates purchased by the Congested Districts Board out of its own funds.

ing the re-sale of estates purchased to those relating to sales between landlord and tenant. The figures thus obtained show the total of all the holdings and demesnes sold to the occupiers. The difference between the two sets of figures represents the estates purchased but not yet re-sold.

TABLE VI. — *Holdings and Demesnes sold to the Occupiers during the Year ended 31 March 1919.*

	Number of loans	Area Acres.	Rent (of tenanted land only) £	Purchase price £	Amount of advances £
Sales between landlord and tenant	6,099	194,392	91,790	2,045,583	2,011,191
Re-sales of estates purchased . .	2,387	59,922	15,672	572,802	569,035
All holdings (and demesnes) sold to the occupier .	8,486	254,314	107,462	2,618,335	2,580,226

TABLE VII. — *Advances Made for the Purchase of Land up to 31 March 1919.*

	Number of loans (1)	Number of estates.	Area Acres	Purchase price £	Amount of advances £
Sales between landlords and tenant	251,416 (2)	12,053 (3)	8,151,715 (3)	87,770,692	87,777,149
Estates purchased for re-sale to tenants . (4)	83,258	2,155	2,791,295	17,858,018	17,743,291
All advances made for the purchase of land (4)	334,674 (2)	14,208 (3)	10,943,010 (3)	105,628,710 (3)	105,520,440

(1) See note (1) to Table V — (2) Not including sales under the Acts of 1869, 1870 and 1881. — (3) Not including sales under the Act of 1869. — (4) Not including the purchase of land by the Congested Districts Board out of its own funds.

TABLE VIII. — *Holdings and Demesnes sold to the Occupiers
under the Land Purchase Acts up to 31 March 1919.*

	Number of loans	Area	Rent of tenanted land	Purchase price	Amount of advances
		Acres	£	£	£
Sales between landlord and tenant	251,416 (1)	8,151,715 (2)	4,118,850 (2)	87,770,692	87,777,149
Re-sales of estates purchas- ed	39,842	1,148,657 (3)	344,812	10,084,923	9,949,677
All holdings (and demesnes) sold to the occupiers . .	= ±				
	291,258 (1)	9,300,372 (4)	4,463,662 (2)	97,855,615	97,726,826

(1) Not including sales under the Act of 1869 — (2) Not including sales under the Acts of 1869 and 1870. — (3) Not including resale of estates purchased under the Act of 1881 nor re-sales under the Acts 1891 to 1896 of estates purchased by the Congested Districts Board out of its own funds — (4) Not including sales under the Acts of 1869 and 1870, nor re-sales of estates purchased under the Act of 1881, nor re-sales under the Acts of 1891 to 1896 of estates purchased by the Congested Districts Board out of its own funds.

Part IV : Miscellaneous Questions relating to Agricultural Economy

I. — ECONOMIC AND SOCIAL CONDITIONS OF THE AGRICULTURAL CLASSES

GREAT BRITAIN AND IRELAND.

PROFIT-SHARING IN AGRICULTURE.

OFFICIAL SOURCES :

REPORT ON PROFIT SHARING AND LABOUR CO-PARTNERSHIP IN THE UNITED KINGDOM. —
Ministry of Labour (Intelligence and Statistics Department) London, 1920.

UNOFFICIAL SOURCES :

- PROFIT SHARING IN AGRICULTURE. — *Edinburgh Review*, No. 467. London, January 1919.
WYLLIE (James), B. Sc : Profit and Loss Sharing on the Farm — *North British Agriculturist*,
Vol. LXXI, No. 39. Edinburgh, 25 September 1919. (Re-printed in the *Journal of
the Board of Agriculture*, Vol. XXVI, No. 9, London, December 1919).
CECIL (Rt. Hon Lord Robert), K. C., M. P. : Profit Sharing in Agriculture. — *Scottish Journal
of Agriculture*, Vol. III, No. 2. Edinburgh, April 1920.
WYLLIE (James) B. Sc., N. D. A. (Hons) : Profit and Loss Sharing in Agriculture. — *Journal
of the Ministry of Agriculture*, Vol. XXVII, No. 3 London, June 1920.
PEERE (M H) : Co-partnership in Farming : A Live Experiment — *North British Agri-
culturist*, Vol. LXXII, No. 36. Edinburgh, 16 September 1920.

As the result of the changes brought about by the War in the position of the agricultural labourer in Great Britain and Ireland, renewed interest is being taken in the application of profit-sharing to agriculture. It is being advocated by those who are desirous of avoiding a struggle between employers and workers in agriculture because they fear that it would be destructive to production and who are of opinion that the creation of small holdings, in which practically no hired labour is employed, cannot afford a complete solution of the problem.

§ I. THE CASE FOR PROFIT-SHARING.

The case for profit-sharing was well stated in an article which appeared in the *Edinburgh Review* in January 1919 and we think it well, for the reader's information, to give a summary of the points of the writer's argument

without ourselves expressing any opinion in regard to their soundness or otherwise.

In fixing minimum wages for agricultural labour, the Agricultural Wages Board were instructed by the Corn Production Act to have regard to the cost of living, but already both employers and men are appealing to another criterion — the returns that farming produces. Masters talk about the wages that the industry will bear; the men are thinking of a greater share in the profits. But farming (the writer of the article argues) is not a standardized industry like cotton-spinning, and in the absence of any scientific method of determining wages, we are driven back on the old give and take method, with the organized men pressing for more and the equally united farmers resisting all demands. Trade unions are now established in agriculture, but it is not an industry suited to regulation by trade union methods. A strike lasting for a few weeks, even for a few days, will ruin a harvest; a stockyard cannot be closed down like a mill; cattle will be injured or killed if their milking or feeding is interrupted. In any well chosen dispute the farmer must yield. The remedy he can use will be to retire from the business and thus small holdings, single man businesses, are likely to grow as the trade union movement strengthens in agriculture. Small holdings are advocated not only for their social value, but as directly increasing the productivity of the soil. This opinion, however, rests upon a misapprehension. A small holder must produce intensively in order to live, but a large holding may also be worked on the same intensive system as a small one. The returns per acre depend upon the style of farming and whatever the style may be that return ought to be larger with the organization of labour, machinery and materials which is only possible under large scale management. It is generally admitted that small holdings are not suited to the growth of corn and the raising of cattle, and, apart from the fact that all the land cannot be put to market gardening or fruit-growing, even these latter industries can be more efficiently conducted upon a large scale than upon a small. The creation of small holdings cannot, therefore, be the general solution of the rural problem, the universal method of satisfying the agricultural labourers' demand for a proper footing. What other alternative is there (the writer of the article asks) to a continuous and destructive warfare between masters and men?

State regulation of wages, on the one hand, and of prices, rents and farmers' profits on the other, the writer excludes as a permanent solution. The ultimate result (he argues) would be either that the masters would leave the business or that the men would be beaten back to the sort of position they endured before the War. The true alternative is to give the worker a share in the profits over and above his wages and to make him a partner in the enterprise. The object is twofold — to ensure that what the land produces shall go to those who earn it and yet to prevent the industry being broken by an excessive wage.

Such is the argument upon which the writer quoted bases his advocacy of profit-sharing in agriculture and it is typical of the arguments which

are being put forward at present in its favour. Opportunely, at a moment when the question is attracting so much attention, the Ministry of Labour has issued a "Report on Profit-Sharing and Co-partnership in the United Kingdom," and this report, though in the main devoted to profit-sharing in industry, contains an account of the cases in which profit-sharing has been applied to agriculture.

§ 2. TYPES OF PROFIT SHARING SCHEMES.

The Report explains at some length what meaning is attached to the expression "profit-sharing." Briefly, it is taken to involve an agreement between an employer and his employees whereby the latter receive, in addition to their wages or salaries, a share, fixed beforehand, in the profits of the undertaking. Emphasis is laid on the words "fixed beforehand," and the definition therefore excludes many forms of payment to workmen which are sometimes loosely called profit-sharing, notably the following forms—(1) "premium bonus," "output bonus" or other rewards proportionate to output, or to an increase of output, irrespective of the general financial results of the business, and (2) gratuities pure and simple given at the absolute discretion of the employer and upon no pre-arranged basis.

With this limitation, the prevailing types of profit-sharing schemes are classified as follows.

1. Schemes in which the bonus is paid in cash.
2. Schemes in which the bonus is credited to a savings or deposit account from which deposits can be withdrawn at short notice.
3. Schemes in which the bonus is paid to a Provident or Superannuation Fund.
4. Schemes in which the bonus is invested in the capital of the undertaking.
5. Schemes in which the bonus is partly paid in cash and partly credited to a savings or deposit account from which deposits can be withdrawn at short notice.
6. Schemes in which the bonus is partly paid in cash and partly paid to a Provident or Superannuation Fund.
7. Schemes in which the bonus is partly paid in cash and partly invested in the capital of the undertaking.
8. Schemes in which the bonus is partly credited to a savings or deposit account from which deposits can be withdrawn at short notice and partly paid to a Provident or Superannuation Fund.

The cash bonus schemes are not all alike, but include the following diverse methods of payment:

- (a) Bonus paid unconditionally in cash.
- (b) Bonus paid in cash, but employees may leave bonus on deposit with the firm.
- (c) Bonus paid in cash, but special facilities given to employees to subscribe for shares in the employing company.

(d) Bonus paid in cash, but employees have the option of taking part of their bonus in shares.

(e) Bonus paid in cash, but employers reserve right to pay in the form of shares in the business.

(f) Bonus paid in cash, or may be invested in a Provident Fund established by the firm, at the option of the employee.

(g) Bonus paid in cash, or credited to a Trustee account for the purchase of shares, at option of employee.

(h) Bonus takes the form of interest on deposits, varying with the rate of dividend on capital ; this bonus is paid in cash unless the employee prefers to leave it on deposit with the firm.

(i) Bonus takes the form of dividend on shares issued gratuitously.

(j) Bonus is that portion of the dividend on shares held by employees which represents the advantages given by the firm to employee-shareholders over shareholders among the general public.

We shall see which of these types are represented amongst the various existing or abandoned schemes of profit-sharing of which the Report furnishes particulars.

§ 3. EXISTING SCHEMES OF PROFIT-SHARING IN AGRICULTURE.

Only eight schemes of profit-sharing in agriculture were known to the author of the Report to be in existence. The following are the names and addresses of the employers with such particulars as are given in the Report.

1. *Fidler and Sons, Royal Berkshire Seed Stores, Reading.* — This firm, which is engaged in seed and potato cultivation and in farming and also acts as potato salesmen, adopted a scheme of profit-sharing in 1883, but no particulars are available.

2. *Lord Rayleigh, Terling, near Witham, Essex.* — Adopted a scheme of profit-sharing in 1908. Average number of permanent employees during the twelve months preceding the declaration of bonus in 1918, 280. Maximum number of casual employees, 30. Number of employees participating in 1918, 161. Bonus credited to a savings or deposit account from which deposits can be withdrawn at short notice. Deposits to the amount of £6,477 are held by 161 employees.

3. *Strutt and Parker (Farms) Ltd., Whitelands, Witham, Essex.* — Adopted a scheme of profit-sharing in 1908. Average number of permanent employees, 300. Maximum number of casual employees 30. Bonus credited to a savings or deposit account from which deposits can be withdrawn at short notice. Deposits to the amount of £6,977 are held by 66 employees.

4. *Wilkin and Sons, Ltd., Tiptree, Essex.* — This company are fruit growers and jam manufacturers, having nine farms and a factory at Tiptree, Essex, and in neighbouring villages. They employ from 220 to 320 workpeople, viz., men, 120 to 150 ; boys, 30 to 50 ; women and girls, 70

to 120. Fruit pickers (about 700) whose labour is seasonal, and for quite short periods, are excluded from these totals.

The company have paid a bonus to their employees since 1898, but, except in the case of foremen, this was not at first on a strictly profit-sharing basis, the bonus to ordinary employees being such sum as the company thought fit. The bonus was paid to employees both on the farms and in the factory, but, until the year 1912, the profits of the two departments were calculated separately, and in some years a bonus was paid in one department and not in the other. From 1912 onwards, however, the bonus was based on the results of the whole business. This scheme came to an end in 1917, being superseded by a pension scheme on a profit-sharing basis. At the present time the company have this pension scheme in operation and also a shareholding scheme. It is to the pension scheme, however, that the company attach by far the most importance.

In March 1910, the company introduced a scheme whereby employees were enabled to become owners of special shares, called "employees' preference shares." These formed part of the company's authorized but unissued capital, each £10 share, however, being divided into ten £1 shares to facilitate their purchase by employees. Employees' preference shares may be held only by (1) persons in the employ of the company, or (2) employees who have retired on a pension or (3) persons specially authorized by the directors. This last term includes any club, society or fund designated to hold such shares. The term "employee" includes any officer, manager, foreman, clerk, or workman in the employ of the company. Provision is made to prevent holders of employees' preference shares from selling their shares without the consent of the directors and then (unless the directors are unable to find a purchaser) only to such person as the directors may designate. In any case they cannot be sold to an outsider, or, if held by any such person, they carry no dividend.

The shares are under the control of the directors "who may allot or otherwise dispose of the same to such persons, at such times, and on such terms, as the directors may think fit; and the directors may accept payment for such shares by instalments, or in any other way they may think fit."

The shares carry the same cumulative dividend of 5 per cent. as the company's other preference shares "and in addition, whenever in any year the reserve fund shall exceed £5,000, the holders of employees' preference shares shall be entitled to a further 2 per cent., making 7 per cent. for the year; and whenever in any year the reserve fund shall amount to £8,000, then to an additional 1 per cent., making 8 per cent. for the year."

The term "reserve fund" is defined as "the total balance of undivided profit left over at the close of any year, after providing for the dividends on the preference, ordinary, and employees' preference shares for that year." The value of employees' preference shares held in February, 1919 was £1,000.

On 23 June 1917, the company established a Trust, called the "Wilkin Provident Trust", for the purpose of providing pensions and

retiring allowances to employees or their widows and for other benevolent purposes. The funds of this trust consist of the employees' half-share of the divisible profits of the company, i. e. half of "the amount (if any) by which the balance of the profit and loss account of the company for each year... shall exceed the amount required to pay 6 per cent. on the capital employed," after making provision for all charges accrued, including the share of the profits payable to directors and to the employees; and for rates and taxes, depreciation, etc. If the profits in any year are insufficient to pay 6 per cent. on the capital, the loss is carried forward, and deducted from the profits of the next or any subsequent year in which any divisible profit is available, before the half share payable to the trustees is calculated.

The company issue three classes of certificates, viz., pension certificates, retiring certificates, and special certificates. Pension certificates are intended to provide pensions at the age of 65, retiring certificates provide a lump sum on retirement; while special certificates are issued "on any other terms and conditions which may be expressed therein." Pensions are payable to the widows of male holders of certificates who die before reaching the age of 65, or to female holders of certificates whose husbands have died. Provision is made for the cases of men (1) retiring before reaching the age of 65, or (2) desiring to remain in the company's service after reaching the age of 65.

In certain circumstances a certificate may be cancelled or forfeited, e. g., in the case of an employee dismissed for misconduct. In such cases the surrender value of the certificate is paid into a common fund, called the Employees' Benevolent Fund, which is applied:

- (i) to the maintenance and education of the necessitous orphan children of deceased certificate holders;
- (ii) to the assistance of necessitous widows of deceased pensioners;
- (iii) to the relief of the necessitous mother of any deceased certificate holder who was formerly supported by such holder;
- (iv) to the relief of any necessitous employee or former employee of the company;
- (v) in payment of subscriptions to hospitals, convalescent homes, etc.;
- (vi) in any other manner approved by the directors of the company.

The sum of £1,743 was paid under the Trust Deed in respect of the year 1916, and the sum of £2,433 in respect of 1917. The number of holders of pension certificates is rather over 100.

The company also receives sums on deposit from employees, on which 5 per cent. interest is allowed. The total amount so deposited amounts to £700.

The company report that their profit-sharing schemes have given satisfaction to themselves and to their employees, promoted harmonious relations between employers and workpeople and lengthened the average period during which their workpeople remain in their employment. They have never had any strike.

5. *Hasler and Co., Ltd., Dunmow, Essex.* — This is a firm of corn and

seed merchants who are also farmers. They adopted a profit-sharing scheme in 1910. The average number of permanent employees is 54. The number of employees participating in 1918 was 48. The bonus is credited to a savings or deposit account from which deposits can be withdrawn at short notice. Deposits to the amount of £2,250 and ordinary shares to the value of £1,300 were held by 61 employees.

6. [*Name and address withheld from publication*]. — A scheme of profit sharing was adopted in 1911. Average number of permanent employees 31. Number of employees participating 23. The bonus is paid in cash.

7. *Wetherall, Drake and Co., Ltd., St. Andrews, Guernsey*. — This company is engaged in tomato-growing. The scheme of profit-sharing, adopted in 1913, has been superseded.

8. *Sir John Shelley-Rolls, Bart., Arington, Iichen Abbas, Winchester*. — A scheme of profit-sharing was adopted in 1919. The average number of permanent employees is 53. The bonus is paid in cash.

The Report also refers to the farm settlements on a profit-sharing basis created by the Board (now Ministry) of Agriculture in favour of ex-Service men. An account of these was given in the article on "Settlement and Employment on the Land of Discharged Sailors and Soldiers in England and Wales," which appeared in our issue of October 1920.

To these existing schemes of which particulars are given in the "Report on Profit-Sharing," we may add an account of a profit-sharing experiment described in the *North British Agriculturist* of 16 September 1920, by the farmer who tried it, Mr. M. H. Peeke.

"I am a farmer in a small way," writes Mr. Peeke, "with none of my own kith and kin save my wife to help me on a farm of 400 acres, mostly grass, in the heart of Surrey, about ten miles from the market town of Guildford. We lamb every year some 200 ewes, calve about 30 to 40 heifers and cows; and in addition there are sows to farrow, mares to foal, and cows to milk twice a day. No practical farmer needs to be told that animals in breeding require constant watching and care, especially near birth, and that want of such attention may mean very heavy loss. Some of those who have been dealing with the hours of agricultural labour appear to imagine that a farm can be run like a factory, and its operations regulated in like manner. This brings me to my first reason for introducing a profit-sharing scheme. Under the Act (1) my men can stop work on Saturday afternoon, and need not come again till 6 a. m. on Monday. If I want them to be on hand, I have to pay them the standard rates of overtime, for in the ordinary way it matters nothing to them whether the animals lamb or calve successfully or the reverse. They get no benefit one way; suffer no loss the other. But if I make them partners? That alters the situation entirely. It is to their interest as much as it is to mine to watch the animals at the most important time, to see that nothing goes

(1) Mr. Peeke is here referring to the Corn Production Act, 1917, under which minimum wages are fixed for determined hours of labour. See the article on "Minimum Wages for Agricultural Labour in England and Wales" in our issue of August-September-October 1919.

amiss. They don't start haggling about hours and overtime, and doing reluctantly what they may have to do. They are there when most wanted; they are as keen as I am myself to see that the cows and ewes are all right. The fact of making your men partners with you in the running of your farm practically does away with the difficulties created for farmers by the eight-hour day, to say nothing of overtime questions.

"There is nothing elaborate or intricate about my scheme. It is simplicity itself. I have arranged for certain men to become partners with me in my business. On my capital I am to reserve 6 per cent. interest. In addition, I, like my co-partners, draw a certain sum agreed upon as wages for my services, and my wife also receives wages for the butter-making and for the other work which she does properly belonging to the farm. The men, as I have said, draw fixed sums as wages, and at the end of the year we share the profits remaining after the deduction of my interest. But — and here is the great advantage — I feel that I have now got my men by my side ready to fight with me instead of against me... I have had evidence already that they are studying my — and their — interests in a way that they did not do before, and that I shall get better and more effective work out of my labour."

§ 4. ABANDONED PROFIT-SHARING SCHEMES IN AGRICULTURE.

Besides the eight existing schemes, 15 other schemes, now abandoned, are known to have been in operation at one time or another. A large proportion were introduced and carried on by wealthy landowners or large tenant farmers for philanthropic reasons, the financial results being generally very disappointing. Nine of the 15 schemes were started in the years 1882-95 and were therefore involved during a large part of their course in the acute agricultural depression that occurred at the end of the nineteenth century, and it is not surprising that profit-sharing under these circumstances was unsuccessful.

As in the case of the existing schemes, so also for the abandoned schemes we give the names and addresses of the employers and such other particulars as are to be found in the Report.

1. *Lord Wallscourt, Co. Galway, Ireland.* — Scheme adopted in 1829. Bonus paid in cash. The reason for the abandonment of the scheme is not known.

2. *William Lawson, Blennerhasset, Cumberland.* — Scheme adopted in 1866 and abandoned in 1872. Bonus paid in cash. The scheme was abandoned because of the sale of the farm.

3. *Lord George Manners, Ditton Lodge Farm, near Newmarket.* — Scheme adopted in 1871 and abandoned, owing to the death of the employer, in 1874. Bonus paid in cash.

4. *Bolton Iving, Gaydon, Warwick.* — Scheme adopted in 1882 and abandoned, owing to losses, in 1890. Bonus paid in cash.

5. *Earl Spencer, Althorp House, Northampton.* — Scheme adopted

in 1886 but abandoned in 1897 owing to want of success. Bonus partly paid in cash and partly invested in the capital of the undertaking. The number of employees at the date of termination was 11.

6. *Earl Grey, Howick, Lesbury, Northumberland.* — Scheme adopted in 1886, and abandoned in 1903 owing to the farms being let or on account of transition from one form of cultivation to another. The bonus was partly credited to a savings or deposit account from which deposits could be withdrawn at short notice and partly paid to a provident or superannuation fund. The number of employees at the date of termination was 85.

7. *John Boyd Kinncar, Kinloch, Fifeshire.* — Scheme adopted in 1887 and abandoned in 1905 on the occupation of the farm being given up. Bonus paid in cash. The number of employees at the date of termination was 24.

8. *Richard Binns, Lovelands, Reigate.* — This employer, who was engaged in fruit-farming, adopted a scheme of profit-sharing in 1888, and it was continued until 1899, when he went into liquidation. Up to 1894 the bonus was partly paid in cash and partly paid into a provident or superannuation fund. From that year it was invested in the capital of the undertaking. The number of employees at the date of termination was from 11 to 13.

9. *G. Holloway, Temple Guiting, Gloucestershire.* — Scheme adopted in 1890 but abandoned in 1892 on the death of the employer. The bonus was invested, in the form of loans, in the capital of the undertaking.

10. *Marquis of Hertford, Ragley, Warwickshire.* — Scheme adopted in 1890 and abandoned in 1904 when the farms were let. Bonus paid in cash. The number of employees at the date of termination was 25.

11. *The Hon. T. A. Brassey (afterwards Earl Brassey) Park Gate, Battle, Sussex.* — Schemes adopted on one farm in 1891 and on another in 1895. Both schemes abandoned in 1899 on the occupation of the farms being given up. On one of the farms the bonus was paid in cash; on the other it was to have been paid partly in cash and partly in shares, but no bonus was in fact earned on this farm. The number of employees at the date of termination was 16.

12. *R. Binns and Son, Cross, near Axbridge, Somerset.* — This firm, who were fruit growers and nurserymen, adopted a scheme of profit-sharing in 1895 which was, however, abandoned in 1897 on the business being transferred. The bonus was partly paid in cash and partly paid to a provident or superannuation fund. At the date of termination there were five employees.

13. *Sir Hereward Wake, Bart., Courteenhall, Northampton.* — Scheme adopted in 1901 and continued until 1916 when it was abandoned owing to the dissatisfaction of the employees with the results. The bonus was partly paid in cash and partly paid to a provident or superannuation fund. The number of employees at the date of termination was from 500 to 700.

14. *Paget and Allsebrook, Oldfallings Farm, Wolverhampton.* — Scheme

adopted in 1913 but abandoned in 1916 on the farm being given up. Bonus paid in cash. At the date of termination there were 5 employees.

With regard to this scheme, Mr. Wilton Allsebrook wrote, under date of March 1919: "I have always been an advocate of profit-sharing and had hoped that it would make the men more careful of their tools, implements, etc., and more industrious, keeping better time, etc. But I must confess that, though I always kept on good terms with my men, and they were always very grateful to receive their bonus at the time, I have never been able to *observe* any difference whatever in their demeanour as affecting time-keeping and carefulness. They are too short-sighted."

15. *Pagei and Rhymer, Tytherington, Falfield, Gloucestershire.* — Scheme adopted in 1914, but abandoned on farm being given up. Bonus paid in cash.

§ 5. THE BASES OF PROFIT-SHARING.

The accounts which we have taken from the Report do not indicate a basis of principle for determining what is the fair share for the employer and men respectively to take out of the profits. For a proposed basis we again turn to the article in the *Edinburgh Review*.

"There are three interests," says the writer of the article, "entitled to share — capital, management and labour. Pay each of them at market rates as nearly as they can be found; then divide any profits remaining according to the payments which have been made to the three interests. Capital, represented by the farmer as a rule, will be paid, say, two per cent. over bank rate to represent the element of risk in the enterprise; management — again the farmer — will be credited with the sort of salary at which a manager of that style of farm could be obtained, on an ordinary large mixed farm something like ten shilling per acre per annum; labour will receive the current rate of wages. These three outgoings would be added together, and the profits remaining would be calculated as a dividend upon this total and distributed pro rata at so much in the pound on whatever has been paid on each interest... Farming is a fluctuating business and there must be years of no profits and even of losses to be provided for. A first step must be to build up a reserve fund, and to that end 20 per cent. of the profits should be set aside and accumulated until the fund is equal to one year's normal payments to capital, management and outgoings... This fund should be invested in easily negotiable securities outside the business so that it could be drawn upon in any year in which a call is necessary in order to make the dividend up to 20 per cent. In years in which a loss is incurred, *i. e.* when the receipts are not sufficient to pay the employer his 6 per cent. on the capital and his salary for management, one-half of the loss may be drawn from reserve fund; the other half should fall upon the employer. It is axiomatic that labour's rate of wages cannot be reduced below the standard to meet losses; moreover,

capital is allowed a high rate of interest in consideration of the risk of occasional losses."

The writer further suggests that the labourer should be encouraged to invest his dividends in the business and that the dividends should be paid partly as a weekly addition to wages and partly as a lump sum at the end of the year.

A similar basis is proposed in a scheme, to which considerable publicity has been given. It was contained in an article contributed by Lord Robert Cecil, M. P., to the issue of April 1920 of the *Scottish Journal of Agriculture*, the official organ of the Board of Agriculture for Scotland. The scheme, which was drawn up by some practical farmers in Lord Robert's constituency, is as follows:

"The problem to be solved in devising a scheme of profit sharing in agriculture is to find one that can be accepted by all parties as fair.

"Some employers have divided among their workmen half the profits, but why half, or any other arbitrary fraction? The only satisfactory basis is to be found by accepting the principle of partnership to the full.

"Who are the parties, and what are the interests concerned in a partnership to carry on farming? Let us suppose an employer and a number of men enter into an agreement to begin farming in partnership. First of all capital has to be found. A certain rate of interest has to be paid for the capital, a rate more or less settled by the money market, but consideration must be given for the extra risk involved in investing money in agriculture. The employer is going to conduct the business, and is entitled to a certain salary as manager. Again his salary is more or less determined by market rates. Then the men have to be paid. There are market rates for their wages. Assume that the farm is hired, and that, after all payments have been made, there are profits available: how shall they be divided? On the partnership principle, the basis for division must be the services that have been rendered, the value of which has already been determined by the amount paid for them. The capitalist has been paid so much for his money, the employer so much for his management, the men so much for their labour. The profits should be shared out in the same ratio.

"To take an example: a farm of 300 acres requires a capital of £4,500, the annual payment of interest on which at 7 per cent. amounts to £315. The manager's salary is paid at £260; the labour bill (9 men at about 47s. per week) amounts to £1,100. The total entitled to participate in the profits is £1675 (interest on capital, £315, plus management £260, plus labour £1,100), and if there is £167 10s. profit to be divided, this will provide approximately 2s. in the pound to be paid out. Capital will receive £31 10s. management £26, and labour £110. Each man receives 2s. for every pound that has been paid out to him in wages during the year. Some men, the foremen, carters and stockmen, will get more than others; on the average the men will receive about £12 4s. each, equivalent to an extra 4s. 8d. per week. Under ordinary conditions the farmer is both capitalist and manager, and therefore would receive interest, salary and

profits on both. In the example given his total return would amount to £632 10s.

"It may be asked, where does the landowner come in: what share should he get? None in the profits, because he is not a partner in the risk. He is getting his rent at market rates, and the land, unlike the capital, is not impaired if the business does not succeed. If the farmer is also owner of the land, he is entitled to a rent for it, which represents a market rate on its capital value, but not to profits, because the security is so good. To return to the partnership analogy, the company might buy land and raise the necessary money by a mortgage of debentures at fixed interest.

"If the broad principle thus outlined is accepted, certain other conditions have to be provided for.

"First of all, farming is a variable business in which the profits fluctuate considerably from year to year. A reserve fund must be built up to meet losses and for the equalization of dividends.

"To this end 20 per cent. of the profits should be set aside until the total thus accumulated reaches a fixed limit, equal to about a year's average outgoings for interest, management and labour. In years when a loss is incurred, the reserve fund may be drawn upon up to 20 per cent. of the limit.

"It this is not enough to meet the loss, still less to pay a dividend, the margin of loss must fall upon capital, which by hypothesis is being paid such a rate of interest as will cover the risk of occasional losses. In the example given, the rate of interest is set at from 7 to 10 per cent., with Government securities yielding 5 per cent.

"Again, to make the scheme truly a partnership, the men should be encouraged to take up a share in the capital. The shares thus acquired will bear interest and a share in the profits. The owners of these shares may call for redemption at par at any time. They must be redeemed when a man leaves the farm or dies, and they may not be sold except to the employer.

"The management, it is suggested, should be remunerated, if at so much per acre, somewhere between 15s. and 20s. per acre, or if on wages paid, at from 20 per cent. to 30 per cent. on the total wages.

"These wide margins are, it is believed, necessary owing to the varying degree of ability required — *e. g.* dairy farming *versus* simple corn growing.

"It must be clearly laid down that the manager has complete control. He may dismiss men and pay such rates as he pleases to particular men, like foremen. But it will be well to have a small committee of the men whom he can consult, or from whom he can receive representation on such matters. This also encourages the feeling of partnership, and the chief economic advantages of profit-sharing are only to be obtained when the men themselves begin to feel some responsibility for everybody doing a good day's work.

"The procedure may now be outlined under which an ordinary farm business may be transformed into a profit-sharing enterprise on this basis.

" A valuation is made of the amount of capital, live and dead stock, tillage, etc., engaged in the business, which, with an assigned amount of working capital, will determine the capital on which interest is to be paid.

" It is submitted that the method thus outlined fulfils the five essentials of a profit-sharing scheme applicable to agriculture :—

" (1) It provides a just and defined basis of division of profits between the three interests concerned — capital, management and labour ;

" (2) It enables labour to obtain an interest in the business ;

" (3) It assesses on a fair basis the shares of different classes of labour — manager, sub-managers, foremen, special men and ordinary labourers ;

" (4) It is immediately applicable to an ordinary farming business with a minimum of legal formalities ;

" (5) It encourages men, in their own interests, to do good work, and diminishes the need of supervision. "

In these two schemes, a fixed rate of interest is paid upon capital before the profits to be shared are calculated, but it also receives a share of those profits. The landlord, however, receives his rent, but no share of the profits. Unlike capital, the land is not considered a partner in the business, but a mere instrument to be paid for at the market rate.

A scheme might conceivably be put forward in which the land was also treated as a partner, in which, that is to say, the landlord received a bonus proportionate to his rent, in the same way as the labourer received a bonus proportionate to his wages.

On the other hand, schemes have been put forward in which even capital is treated as an instrument, receiving interest at a fixed rate, but not sharing in the profits which remain to be distributed. A scheme of this type is given in the following paragraph.

§ 6. A PRIZE SCHEME OF PROFIT-SHARING IN AGRICULTURE.

In 1919, ten agricultural papers, at the request of Mr. James Ismay, of Blandford, Dorset, invited contributions of suggested schemes of profit and loss sharing in agriculture. Mr. Ismay offered prizes of £10 for the best scheme submitted to each paper and a prize of £100 to the author of the best scheme of the ten. The scheme which was awarded the £100 prize was submitted to the *North British Agriculturist* by Mr. James Wyllie, a member of the staff of the Glasgow and West of Scotland College of Agriculture. The scheme was published in the *North British Agriculturist* of 25 September 1919 and afterwards widely reproduced in other papers. The *Journal of the Ministry of Agriculture* not only reproduced the scheme in its issue of December 1919, but in its issue of June 1920 published an article by Mr. Wyllie showing how the scheme would work out in practice. We think it worth while to reproduce both the scheme and Mr. Wyllie's explanation of its working.

The scheme was as follows :

" I. *Object of Profit-Sharing.* — To improve the social, economic,

and general relationships between employer and employees; to bring them to recognize that their interests are common and not antagonistic; and thereby to increase the total annual income or earnings of both employer and employees.

" II. *Conditions Essential to Success.* — (1) There must be no feeling of compulsion on either side. The employer must admit the employees' claim to share in the profits as presently earned; the employees must admit that the increase of profits which is expected to accrue under a successful scheme of profit-sharing will be due to better organization and management on the part of the employer as well as to higher efficiency in the labour department and therefore that the employer is equitably entitled to share in such increase.

" (2) There must be a proper system of accounting.

" (3) Both employer and employees must follow the spirit as well as the letter of the scheme, and there must be no attempt on either side to snatch an unfair advantage either in drafting the terms of the agreement or in carrying them out.

" (4) The scheme should be as simple as possible, especially to begin with, on the principle that one is not so likely to give unqualified support to something which one does not fully understand.

" III. *Definition of Profit.* — The term 'Profit' shall be interpreted as follows: — In making up the Profit and Loss Account for the year, expenses chargeable against the farm shall include *inter alia*, (a) the total wages, including the value of all perquisites, payments for overtime, harvest-money, etc., paid to each employee of whatever kind; (b) interest on the capital invested by the employer as shown by the farm balance sheet, (c) an allowance to the employer for ordinary work done on the farm by himself or by members of his family as well as for the work of organization and management — this allowance to be hereafter called 'employer's wages.'

" IV. The farm shall be credited with (a) the estimated yearly value of the dwelling-house occupied by the employer and his household, and (b) the value of all farm produce consumed by the employer and his household. Income tax payable by the employer, as well as other payments of a personal nature, shall be excluded, but a fair allowance shall be made for depreciation on machinery and other equipment.

" V. *Employees' Wages.* — Employees' wages shall on no account be lowered simply because they are to share in the profit, and the wages of employees and employer shall rise and fall together. All perquisites shall be valued according to the scale adopted by the wages board for the district in question.

" VI. *Interest on Capital.* — The rate of interest allowed on the employer's capital shall be based upon the current rate paid by first-class industrial stocks or shares or, alternatively, as may be agreed, upon the current bank rate, plus one to two per cent. It shall be the duty of the auditors to see that the amount of capital on which interest is calculated is fair and reasonable, and in particular that stocks in hand are not over-

valued, and that only such monies are included in the balance sheet as are necessary for the proper working of the farm.

"VII. *Employers' Wages*. — The employers' wages shall be based upon the salaries actually paid to managers of home and co-operative farms, etc., in the district in question, or alternatively, as may be agreed, upon a sum representing 8 to 12 per cent. of the employers' capital as above determined.

"VIII. The yearly value of the farm dwelling shall be taken as it appears on the valuation roll, or, failing that, it shall be assessed on the same basis as cottages included in the employers' perquisites. Similarly, all farm produce consumed by the farmer and his household shall be assessed in the same way as where that produce is given as employees' perquisites. Local rates shall be allocated amongst employees, employer and the farm according to the same principles as are implied in the above.

"IX. *Employees Eligible to Share*. — Only employees regularly engaged on the farm shall be eligible for participation in the profit, *i. e.*, all employees engaged by the week, month, half-year or year, as well as regular day-workers, such as milkers. No employee shall be eligible who has not been in the service of the employer for a period of at least six consecutive months, but not necessarily full time. In the course of about five years this period may be extended to twelve months.

"X. *Principle of Sharing Profit*. — The profit as above determined shall be apportioned as follows:—

"(1) Ten per cent. of the profit shall be placed to a reserve fund, subject to par. II.

"(2) The remainder of the profit shall be divided amongst (a) the employer, (b) eligible employees and (c) other employees in proportion to the total wages paid to each class.

"(3) The proportion falling to the ineligible employees shall be added to the reserve fund.

"(4) Before apportioning the eligible employees' share, two per cent. of the wage shall be added to each employee's wage for each full year of service after the first. The final division shall be made amongst the eligible employees in proportion to the total wages as thus adjusted.

"(5) The profit thus allocated shall be paid in cash.

"XI. *Reserve Fund*. — A reserve fund shall be set up as stated in par. 10, but this fund shall not be allowed to exceed an amount to be agreed upon, such as one year's wages of employer and employees. If and when the reserve fund reaches the maximum the whole profit shall be apportioned and the amount falling to the ineligible workers shall be divided equally between the employers and the eligible employees.

"XII. *In the Event of Loss*. — In the event of the year's working resulting in a loss, either (a) the loss shall be carried forward and no profit shall be divided until this loss has been made good or (b) the reserve fund shall be drawn upon to the extent of the loss, but no more, or (c) the reserve fund shall be drawn upon to the extent of the loss, and also sufficiently to pay not less than 5 nor more than 10 per cent. on the wages of both

employer and employees — all according to the state of the reserve fund and by agreement.

"XIII. *Books to be Audited.* — The accounts shall be audited each year by an auditor mutually approved by employer and employees and his decision shall be final.

"XIV. Before any employee shall be eligible to share in the profits he or she must agree in writing to the terms of the agreement as sketched above.

"XV. *Notice to Terminate.* — One year's notice shall be given by either party in order to terminate the agreement, and in the event of determination the reserve fund shall become the property of the employer as a measure of compensation for the risk he runs in having the agreement terminated, while the scheme shows a loss without having any reserve fund."

To his scheme Mr. Wyllie appended the following notes:

"(1) The term 'profit' has been defined for the particular purpose in view.

"(2) The above scheme is intended for tenant-farmers and their employees, but it could readily be adapted to suit the case of proprietor-farmers and their employees.

"(3) It will be understood that in practice the agreement outlined above will require amplification so that there may be no misunderstanding on any of the points raised.

"(4) No attempt has been made to discuss the relative advantages of co-partnership and profit-sharing."

The explanatory notes given by Mr. Wyllie in his article in the *Journal of the Ministry of Agriculture* of June 1920 are as follows:

"1. *The Balance Sheet.* — The foundation of any profit and loss sharing scheme is a properly constructed balance sheet showing, *inter alia*, the actual amount of capital invested in the farm. Since capital is one of the factors to be remunerated, the amount must be accurately determined. In particular, the valuation of stocks in hand must be neither too high nor too low, while the amount included for each at the bank should not be more than is necessary to carry on the farm as a business proposition. Except in special circumstances (which, it may be said, will quite frequently arise), the valuation should be made either according to standard or fixed values, as in the case of sheep stocks, dairy herds and working horses, or on the basis of estimated cost of production or market value, whichever is the lower. It is highly desirable, and will make for confidence amongst the employees, that the valuation should be made by a disinterested party, and that the balance sheet should be properly certified.

"2. *Rate of Interest on Capital.* — At the outset an agreement should be arrived at between the employer and the employees as to the rate of interest which is to be allowed on the invested capital. Under present conditions it is suggested that the rate should not be less than 5 nor more than 7 per cent. per annum. These limits are put forward for the principal reason that employees are not likely to agree to more than 7 per cent., while the employer is not likely to accept less than 5 per cent. per annum,

and it is more important to have agreement than to attempt to justify a certain rate by reference to the riskiness of farming as a business, or by pointing to prospectuses offering 8, 9 and 10 per cent. on what are called Preference Shares.

" 3. *Accounts*. — For the purposes of profit and loss sharing, nothing but a simple system of accounting is required, but a complete record should always be kept of the wages paid to each hired worker. Particulars should also be kept of all ordinary manual work done by the farmer or by members of his household, and it is desirable that a weekly or monthly record should be kept of farm produce consumed in the farm house.

" 4. *Employees' Wages*. — The main object in this connection is to ascertain the total *earnings* of all the hired workers, including cash wages, payments in cash for overtime, harvest, lambing, etc., and perquisites or allowances in kind — cottage and garden, board and lodging, potatoes, milk, oatmeal, etc. Perquisites should generally be valued on the basis laid down by the Central Wages Board, but there is, of course, no reason why the employer and employees should not agree upon another scale. The scale adopted here should also be used in valuing farm produce consumed in the farm house. Profit and loss sharing would be simplified if all wages were paid in cash. It will be clear that the inclusion of perquisites at this point is necessary, not to enable the profit to be accurately determined (for this is not affected), but to enable the profit to be equitably distributed.

" 5. *Employer's Wages*. — This term is used to cover the value of ordinary manual work done by the farmer or by members of his household, as well as for his services as manager of the business. Manual work should be charged at current rates for hired labour of the same class, while the charge for management should be based upon salaries actually paid to farm managers in the district. The main desideratum here, again, is that there should be agreement as to the rates and total amount to be charged for employer's wages and, in any case, employer's and employees' wages should rise or fall together.

" 6. *Farm Credits*. — The farm must be credited with the estimated annual value of the farm dwelling-house as well as with all farm produce used in it.

" 7. *Profit or Loss*. — The profit to be distributed (or the loss shown) will appear after making the adjustments above indicated, that is, after charging the farm with (a) Interest on Capital, (b) Employees' Wages, and (c) Employer's Wages — the rest of the accounting being on the usual lines.

" 8. *Example*. — The following example may now be given to show how the Scheme would work in practice. On a certain farm accurate accounts have been kept since 1905, and the summarized results for the last two years were as follows (1) : —

(1) All figures given to the nearest £1.

<i>Year ending Michaelmas</i>	<u>1918</u> £	<u>1919</u> £
Receipts during year	4,064	3,752
Capital at end of year	4,765	4,775
	£ 8,829	£ 8,527
Capital at beginning of year.	3,947	4,765
Payments during year.	3,992	3,342
Balance	890	420
	£ 8,829	£ 8,527
Cash wages paid	£ 619	£ 874

“ For profit and loss sharing purposes the following adjustments would be necessary :—

	<u>1917-18</u> £	<u>1918-19</u> £
(1) Cash wages paid	619	874
Add Rent of two cottages (only perquisites)	10	10
Total Employees' Wages	£ 629	£ 884
To be divided into:		
Wages paid to “ineligible” workers . .	40	64
Wages paid to “eligible” workers . . .	589	820
	£ 629	£ 884

(2) It was agreed to allow the farmer £300 per annum for management, while the work of two sons was valued at £125 in 1917-18 and £160 in 1918-19, hence total *employer's wages* was £425 and £460 in 1917-18 and 1918-19 respectively.

	<u>1917-18</u> £	<u>1918-19</u> £
(3) Balance as shown above.	890	420
Deduct: Interest on Capital at 5 per cent.	197	238
Employer's wages.	425	460
	622	698
	268	(-) 276
Add: Rent of farm house.	20	20
Farm produce used in house. . . .	80	110
		130
	368	(-) 148
Deduct: 10 per cent to Reserve Fund . .	37	—
Actual Amount for Distribution . .	£ 331	

(4) Proportion allocated to Employer, viz. :—		£
$\frac{425}{629 + 425}$ of 331	=	133
Proportion allocated to ineligible Employees (to be added to Reserve Fund) viz. :—		
$\frac{40}{629 + 425}$ of 331	=	13
Proportion allocated to eligible Employees, viz. :—		
$\frac{589}{629 + 425}$ of 331	=	$\frac{185}{£ 331}$

"The net result, therefore, in 1917-18 is that £50 (£37 + £13) is placed to reserve, while the employer gets £133 and the employees £185, both sums being paid in cash.

"This latter sum has now to be distributed over the eligible workers according to the total earnings of each as shown by the wages record. In this case there were 11 workers regularly employed, so that the average share per worker is about £17, or 6s. 6d. per week.

"So far as the year 1917-18 is concerned there has been no difficulty, for the principal reason that there has been a surplus profit to be shared. What about 1918-19, however? Here there is a deficit, for profit-sharing purposes, of £148.

"As a pure matter of logic, it might be urged that this loss should be shared on essentially the same lines as the profit, *i. e.* between the employers and employees. On the other hand, any such proposal would effectively ruin the scheme in the eyes of the workers, and in any case it must be recognized that wages cannot be expected to *fluctuate* in the same way as profits.

"In such circumstances as the above it is proposed to carry forward the deficit to the year 1919-20 and make it a first charge on the surplus shown for that year, or the reserve fund may be drawn upon to cancel whole or part of the deficit.

"9. *The Reserve Fund.* — It is clear that the most critical time in the life of a profit and loss sharing scheme is the period which elapses before the reserve fund has reached an amount large enough to meet the contingency which has here arisen. Various methods of meeting this difficulty have been suggested, such as the creation of a reserve fund by the employer at the commencement of the scheme. On a broad view of the case, however, it is obvious that unless such a scheme can be completely self-supporting *over a period of years* it cannot possibly survive for very long. In other words, the scheme ought to resolve itself into a *profit-sharing* scheme. Losses there may be in occasional years or even in successive years, but unless the profits exceed the losses by an appreciable amount over a period of years nothing can save the scheme from speedy extinction.

"It may be useful, therefore, to take the results from the farm in question and show how a profit-sharing scheme would have worked out had it been in operation since 1905. These results are summarized in Table I (page 54).

"10. *The Scheme for 14 Years.* — It is evident that had the scheme started in 1914 the reserve fund in 1918 would have been large enough to tide over the year 1918-19. In the table, the deficit of £148, together with sufficient to pay a 5 per cent. 'dividend' on wages, viz. £64, has been drawn from the reserve fund, which at Michaelmas, 1919, stands at £334. Had the reserve fund been larger it would have been possible to pay up to 10 per cent. on wages, but in view of the previous experience it would appear to be unwise to make too severe a call upon the reserve fund.

"In considering this table attention may be directed to the following points :

"(a) A profit and loss sharing scheme was not actually in operation on the farm.

"(b) The *Balances* shown and the cash wages paid are as given in the accounts, but the adjustments which have been made are not necessarily those which would have been agreed upon between employers and employed. This latter fact, however, does not detract from the value of the table as an illustration of the principle of profit and loss sharing.

"(c) It is clear that had the scheme started in 1909-10, it would almost certainly have failed, simply because there were no profits to share for a period of 4 years in succession. On the other hand a start in 1905-06 might have enabled the scheme just to survive the lean years of 1909-10 to 1912-13, for by this time the employees would have felt the benefits during 1905-06 to 1908-09.

"(d) In any case, it must be emphasized that if the objects of profit and loss sharing had been realized, not only would the profits have been greater in the good years, but also the losses would have been less in the poor years. The table shows that during the 14 years 1905-06 to 1918-19 the sum of £2,635 was distributed amongst the employees, while £1,390 was allocated to the employer. This is equal to about £188 per annum to employees and about £100 per annum to the employer. Assuming an average of 10 regular employees, the net result is that each employee would receive over £18 per annum, or about 7s. per week on the average.

"Now, the result of the operation of a profit and loss sharing scheme should be to increase the total profits over a period of years — such increase being due not only to increased effort on the part of the employees but also to better organization on the part of the employer and to the much greater confidence which it gives him in the direction of more intensive production in every way. Unfortunately, it is impossible to make any useful estimate of what this increase of profit might amount to, but it is clear that unless the employer is satisfied that there is an increase he will, rightly or wrongly, be inclined to think he is giving 'something for nothing.'

"(e) The question is commonly raised : In what way do the employees share in the losses? The table given should make it quite clear that they

TABLE I. — Profit and Loss Sharing Statement for the 14 Years 1905-6 to 1918-19

Year ending Michmas	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919
I Receipts during year	1,886	1,910	2,020	1,685	1,789	2,203	1,175	1,912	1,773	2,060	2,875	5,400	4,004	3,752
Capital—end of year	4,401	2,449	2,260	2,564	2,394	2,038	1,850	1,648	1,724	1,431	3,035	3,047	4,705	4,775
Totals	4,287	4,359	4,280	4,249	4,133	4,241	3,425	3,560	3,497	5,391	5,910	9,116	8,829	8,397
Capital—beginning of year	2,423	2,401	2,549	2,260	2,364	2,394	2,038	1,850	1,724	1,431	2,431	3,047	1,947	4,705
Payments during year	1,903	1,379	1,444	1,337	1,409	1,793	1,300	1,455	1,493	2,113	1,348	1,333	3,992	3,342
Balance	301	579	377	612	160	64	97	153	356	1113	5010	1,533	690	420
Totals	4,287	4,359	4,280	4,249	4,133	4,241	3,425	3,560	3,497	5,391	5,910	9,116	8,829	8,397
II. Cash Wages Paid	486	446	434	420	370	361	387	393	388	433	472	516	919	874
Add rent of Cottages (2)	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Total Employer's Wages	496	456	444	430	380	371	397	403	398	443	483	526	929	884
Proportion to Ineligible Workers	30	35	30	25	33	24	18	34	16	33	48	36	10	64
eligible Workers	466	421	414	803	347	347	379	369	382	410	435	510	589	820
III. Management Charge	160	160	160	160	160	160	160	160	160	180	200	250	300	300
Work done by two Sons	—	—	—	—	—	—	—	—	—	26	39	60	123	160
Total Employer's Wages	160	160	160	160	160	160	160	160	186	219	241	310	423	460
IV. Balance, as above	301	579	377	612	160	64	27	155	356	1,155	1,346	1,533	890	420
Deduct Interest plus Employer's Wages	245	244	246	239	230	244	211	234	232	355	362	307	622	698
Add Farm House Rent (\$20) plus Farm Produce used in House	56	535	131	414	—	180	—	79	104	840	966	1,026	208	—
Carry no per cent. to Reserve Fund	116	395	191	474	—	144	—	70	70	70	80	80	100	130
Amount available for Distribution	12	39	19	47	—	144	—	70	171	920	1,066	1,106	368	148
Allocated to Employer	104	356	178	437	—	—	—	—	41	92	106	110	37	212
to Employees	23	93	46	116	—	—	—	—	—	828	960	996	331	64
to Reserve	84	243	118	291	—	—	—	—	—	274	319	361	133	23
Total Reserve Fund	5	20	8	29	—	—	—	—	—	513	577	593	285	47
	17	76	103	170	140	80	8	0	41	174	344	496	516	334

(1) Interest charged at 3% per cent. per annum for 1905/6 to 1910/11. \$60 loss \$134 loss \$133 loss \$133 charged against 1911/12 to 1913/14. carried forward against 1914/15 to 1918/19. forward profit.

(2) No allowance made for interest accruing on Reserve Fund or for interest payable on losses carried forward.

(3) The method here adopted of dealing with the Reserve Fund is only one of several possible methods.

do share. Assuming that during the years 1909-10 to 1912-13 the employees had done their utmost, but that for reasons beyond the control of either employer or employees the farm still showed losses, is it not true to say that the employees had given 'something for nothing,' i. e., that they had shared in the losses? They had worked harder than they had any need to, and for this extra effort they had received nothing.

"(f) Lastly it must be pointed out that the relatively high profits shown during the war years were partly due to the realization of the capital in the soil by cross-cropping and so on. Hence, had a scheme of profit and loss sharing been in operation, the farmer would have been justified in placing a certain amount to a special Reserve Account towards the time when the capital had to be put back into the soil."

Concluding his notes on the scheme, Mr. Wyllie urges that, before any decisions are arrived at, suitable steps should be taken to ascertain the views of the employees, either by meeting them as a body or, preferably by meeting a small committee appointed by themselves.

* * *

Nothing has been said in this article of co-partnership as applied to agriculture. Co-partnership is, it is true, an extension of profit-sharing, but it involves a further principle — the control by the workers of the business. In a strictly co-partnership undertaking the employer is completely eliminated. The workers are their own employers and, as such, act through a committee appointed by themselves, which nominates the manager. A few instances of co-partnership farming exist in England but we are here concerned only with those undertakings in which the labourers share in the profits but do not control the business or have only a very limited voice in its management.

MISCELLANEOUS INFORMATION RELATING TO THE ECONOMIC AND SOCIAL CONDITIONS OF THE AGRICULTURAL CLASSES.

ARGENTINA.

ORGANIZATION OF THE AGRICULTURAL LABOUR MARKET IN THE PROVINCE OF BUENOS AIRES — *Anales de la Sociedad Rural Argentina*. Buenos Aires, March 1920.

By a decree of the 7 January 1920, which came into force on 1 February following, various provisions were made for the organization of the agricultural labour market in the province of Buenos Aires. To facilitate the needful selection among the agricultural labourers, the decree provides for close vigilance over all the work done by them by a special commission nominated by the Provincial Labour Department in every centre of population in the agricultural districts to which the required labourers may be sent either for harvesting or other agricultural work

Fifteen days before the harvest, the Labour Department is obliged to publish the number of labourers required for each district, and the wage assigned to them, and also to notify the presence or absence of any other class of working men who may be on strike in the same locality.

To every workman sent to these districts a pass-book is given, a facsimile of which is kept in the Provincial Labour Department, and in which will be stated the personal qualifications of the man, and the kind of work at which he was employed in former years. The employer and a member of the district commission will enter in the same book a statement as to the good or bad conduct of the workman during his stay in the district.

At the end of the harvest season, the Department will endeavour to provide those agricultural labourers who have been especially remarkable for assiduity and diligence, with work also for the winter, employing them in road-mending or other work in the nearest district where labour is required.

The decree also provides that ten consecutive years of work will be considered by the Executive as a title to admit the workman to the number of those to whom, for special merit, a plot of ground will be assigned in the division of the public lands. To this subject the Argentine legislature is giving close attention with a view to increasing in the best manner possible the agricultural production of the Republic.

FRANCE.

THE APPLICATION TO AGRICULTURE OF THE SYSTEM OF ALLOWANCES FOR FAMILY CHARGES — *ENQUÊTE DU MINISTÈRE DU TRAVAIL*, in the *Bulletin du Ministère du Travail* Paris, March-April 1920. — RICHMOND (P) 'Allocations pour charges de famille et caisses de compensation', in the *Revue d'Économie Politique*, Paris, September-October, 1920 — *La Main-d'œuvre agricole* Paris, October 1920

During the last two years, the consideration of the position of the family of the worker in the payment of wages has given rise to a most interesting movement which is developing with extraordinary rapidity.

For some time past the employés of certain public administrations and of great railway companies have had the benefit of additional wages in proportion to the number of their children. By a law of 30 December 1913 rules on this subject were made for professional soldiers extended by a law of 17 April 1917 to state employés of every kind.

On the initiative of employers belonging to many different industries, this system was extended, beginning with November 1916, to an increasing number of workmen, and it has been stated in the Press, as the result of an enquiry recently made by the Ministry of Labour, that the number of workmen affected is 2,000,000.

While the system was being extended, it was at the same time being rapidly perfected.

In one single district the majority of the manufacturers had been obliged

to apply the system to their establishments, so much was it in favour among their workmen. But certain indications gave rise to the fear that some of the employers would seek to recruit their staff only among unmarried men, or men with small families, and would set aside fathers of numerous families. Thus the reform ran the risk of injuring those whom it was intended to protect. Then the happy idea was conceived that all interest in taking such a course might be removed by establishing among the employers a sort of mutual society for insurance against the risk of inequality in the family charges of their employees. This result was obtained by the constitution of a central bank called *Caisse de Compensation*, to which those employers become affiliated who desire to organize in their businesses the system of allowances; the charges resulting from the application of the system are borne not by each business, but by the bank itself. Practically the system works in this way: The employers pay directly to the workmen the allowances provided for; the Bank calculates monthly or quarterly the total sums thus paid as allowances by the affiliated businesses; and on the other hand it calculates the total sums paid as wages. These calculations are made on the basis of information supplied by the members. The proportion between the two totals gives, as a percentage of the wages, the sum paid in allowances. This percentage, slightly increased to defray the cost of administration, is the quota to be paid by the members. Nothing more is to be done except to fix the amount due from each. The Bank knows the total amount of wages paid in each business, and therefore can calculate the corresponding quota. On the other hand, it knows the total sum paid in each business for allowances; if this should exceed the amount of the quota payable, the Bank pays the difference to its member, but if on the contrary it should be less than the quota, the member pays the difference to the Bank.

The application to agriculture of the system of allowances for family charges presents special difficulties. A first attempt at Compensation Banks has just been made by the Regional Union of Agricultural Syndicates of the Ile de France, under the name of Mutual Syndical Bank of Insurance and Thrift. This Bank is supported only by the quotas of employers who are its members, and by donations and subsidies from interested persons. Its object is to pay to workmen and workwomen:

- (1) A sum of 100 francs in case of marriage;
- (2) A maternity premium fixed at 200 francs, payable by instalments of 50 francs per month during the two months preceding the presumed date of the birth, and the two months following it;
- (3) Monthly allowances fixed at 10 francs for the second child, 20 francs for the third, 30 francs for the fourth, 40 francs for the fifth, and so on.

Thus a family having seven children would receive monthly 185 francs.

Members pay a fixed annual subscription of 5 francs per 100 hectares plus a share in the allowances distributed by the bank to be calculated at so much per hectare and a share in the general expenses, which must never exceed 1 franc per hectare.

FRENCH COLONIES

THE REGULATION OF LABOUR IN MADAGASCAR — ARRÊTE DU 9 AOÛT INSTITUANT UNE COMMISSION DU TRAVAIL DANS CHAQUE CHEF LIEU DE PROVINCE ET EVENTUELLEMENT DANS LES DISTRICTS IMPORTANTS and ARRÊTE DU 20 AOÛT 1920 RELATIF AUX CONTRATS DE TRAVAIL À MADAGASCAR ET DEPENDANCES *Journal Officiel de Madagascar* Tananarive, 21 August 1920

By virtue of a Decree of the Governor General of Madagascar, dated 19 August 1920, a labour committee was instituted in the chief town of every province, to be composed of the chief of the province or his deputy as president ; of two French colonists appointed by the Consultative Chamber ; of two native notabilities chosen by the chief of the province from a list of four names sent in by the Consultative Council, and of two additional members, one French, the other native. Further, should the importance of the colonization of a district require, the chief of the province will institute in this district a labour committee composed in the same way, under the presidency of the chief of the district. The functions of the labour committees will be :

(1) To fix, as the case may require, the normal rate of wages to be paid for every kind of work :

(2) To determine according to local customs the normal methods of payment for labour whether by the day, by piece-work or according to output ;

(3) To give an opinion on any question relating to labour in the district.

The normal rates of wages fixed by the commissions are to be only indications, which do not interfere with the freedom of labour and the law of supply and demand.

A second decree, passed on 20 August, provides that labour contracts made between European or native employers and native labourers shall be subject to the visa of the chief of the district. In this case the contracts must contain the following declarations and stipulations :

(1) The surname, Christian name, nationality, occupation and residence of the employer ;

(2) The name, surname, age, occupation, and residence of the employee ;

(3) The nature of the work to be done with a stipulation as to its duration according to local custom, which duration must not be less than fifteen days per month ;

(4) The duration of the engagement, which shall not be less than one month, nor more than two years, or shall continue till the completion of a certain piece of work, provided that it is not for less than a month or more than two years, also the date on which the contract will come into force ;

(5) The rates of wages and the dates of payment.

Native employers must prove that they are agriculturists, tradesmen,

or manufacturers, and state the number of workmen needed for their undertakings.

This decree does not provide for any proceeding against the employé in case of abrupt or unjustifiable breach of contract. The reason is that an infraction of this kind comes under the authority of councils of arbitration, instituted by decrees of the 22 October 1906, 19 November 1909, and 20 June 1910. A plan of re-organization of the councils of arbitration, fixing the limits of their authority, is now under consideration.

SPAIN

GENERAL EMPLOYMENT BUREAU AND GENERAL OFFICE OF STATISTICS OF THE SUPPLY AND DEMAND OF LABOUR. — *Gaceta de Madrid*, No. 275, 1 October 1920.

By a Royal Decree dated 29 September 1920 a General Employment Bureau was established in Spain, and also a General Office of Statistics of the Supply and Demand of Labour. Both offices were placed under the direction of the Ministry of Labour.

In making such an important decision, calculated considerably to reduce the loss suffered by the working classes from unemployment, the Government did not desire itself to assume every function tending to the attainment of the aim proposed, but wisely decided to take advantage of the work which other public and private bodies were carrying on for the same purpose. For this reason, communal and provincial councils and trade corporations and associations are all called upon to aid the Government, which will stimulate and encourage all employment bureaux organised by such bodies by granting them adequate subsidies and indemnities.

The Labour Ministry will take the necessary measures to establish local offices where none such exist, and to co-ordinate the efforts and facilitate the task of those already in existence.

These last will always be free to draw up such rules and regulations as they may consider best adapted to their object, but in order to enjoy the benefits granted by the Government they shall in no case assume a political character, and their managing committees shall be formed of equal numbers of representatives of employers and workmen, together with a few experts in social questions.

The Employment Bureau of the Ministry of Labour will undertake the regular interchange of supply and demand between provinces or districts, and in concert with local bodies, especially with local labour exchanges, will make all necessary arrangements to facilitate travelling for workmen, and placing them where there is a demand for labour. The General Employment Bureau will also communicate to the local labour exchanges the requests for and offers of labour received from abroad. It will also act as a consultative and supervising body, and each year will publish

a general report of all the work done on behalf of the working classes, based on the special reports sent in by the labour exchanges.

The labour exchanges in their turn are to endeavour to establish direct communication between employers and those seeking work within their districts, but they will also maintain relations with neighbouring labour exchanges in order to direct labour to the localities where it is required. They will use their good offices with benevolent institutions and charitable organizations to alleviate the evils of unemployment, and they will act as arbitrators in disputes between employers and workmen. Every month they are to send to the Ministry of Labour a detailed statistical report as to labour and unemployment, classified according to trades, and they are to carry out all the instructions which may be sent to their office from the superior Ministry.

All these functions must be performed gratuitously, and the labour exchanges can not claim the indemnities and subsidies contemplated in the Decree, unless they can prove to the Ministry, by sending in their rules and annual and monthly reports, that they have adhered closely to the instructions received.

II. — LAND SYSTEMS

MISCELLANEOUS INFORMATION RELATING TO LAND SYSTEMS.

ARGENTINA

DISTRIBUTION OF PUBLIC LANDS AND FORMATION OF NEW AGRICULTURAL COLONIES — *La Nación*, 3 October, 1920.

The Office of Lands and Colonies in Argentina has completed an accurate survey of the lands situated in the national territories of Chaco, Formosa and Misiones based upon data already at its disposal, and upon additional information collected by the exploration commission which visited these territories.

On the basis of the results of these inquiries, decrees will soon be issued to determine the situation and conformation of the various lots into which the public lands of these regions will be divided.

Each decree will fix the legal status of a colony, and will determine which of the colonists, having fulfilled the conditions laid down by the regulations, are entitled to receive from the State their definite title of ownership. The decrees will also determine what lands are vacant and available to be let or occupied.

As soon as the existing colonies have been systematized, it is the intention of the Government to form more new colonies, so as to intensify production in the territories mentioned and to establish a still larger population.

POLAND.

AGRARIAN REFORM. — PERNOT (Maurice): L'épreuve de la Pologne, in the *Revue de Deux Mondes*, Paris, 1 November 1920.

In the division of land there is a limit, beyond which the more it is exceeded the less will the earth produce. The limit varies according to certain factors, for instance, the natural fertility of the soil, the density of the population, and the technical skill of the cultivators. In Galicia the limit has been exceeded, and the land has been subdivided to such an extent that it is not sufficient to feed a too dense population. In Posen the limit is almost reached; the land is so divided as to give a maximum of production; the agricultural labourer lives better and more comfortably, cultivating land which does not belong to him, than does the Galician peasant, exhausting himself over the too small plot of ground of which he is proprietor. This is the reason why in Poland the agrarian crisis is more acute where the land is most divided.

On 10 July 1919, the Polish Diet, of which the greater number of the members are peasants, gave its sanction to the principle of a vast agrarian reform; expropriation and subdivision of the great estates, public, ecclesiastical and private, handing over the land to those who cultivate it, etc. This resolution was passed by a majority of votes; but before it came into force it was necessary to complete it by a law regulating in detail the procedure and the application of the reform. This law was definitely passed by a unanimous vote on 15 July 1920.

M. Maurice Pernot thus summarises the broad outlines of the Polish agrarian reform:

Landed property is divided into a certain number of classes, according to which it will be placed successively at the disposal of the public services appointed to carry out the reform.

1st Class: State lands (public property, "majorats," property held in succession to States which have been incorporated in Poland).

2nd: Property belonging to members of families once reigning in such States.

3rd: Property of the former *Russian Peasants' Bank*, and of the former Prussian Colonization Commission.

4th: Property in mortmain, lands belonging to bishoprics, chapters, parishes and convents.

5th: Property belonging to public institutions or various foundations.

6th: Private estates irregularly or badly managed.

7th: Private estates divided into plots without authorization from the appointed public services.

8th: Property acquired between 1 August 1914 and 14 September 1919 by persons whose usual occupation is not farming.

9th: Property purchased during the same period by persons unable to pay the price except by means of profits resulting from speculation.

10th: Property which during the last five years has changed owners more than twice, except by way of inheritance.

11th: All other private property, and in the first place that which was devastated during the war, the owner of which has not undertaken the work of restoration.

The estates comprised in the first five class are expropriated, subject to a previous understanding with the Holy See as regards ecclesiastical property, and an undertaking on the part of the State to respect the intentions of the founders with regard to foundations. Those in the succeeding classes will successively and as required be compulsorily purchased. No one proprietor will be allowed to hold more than 60 hectares in industrial and suburban zones or 180 hectares elsewhere, except in certain districts of Posen and in some of the eastern parts of the Republic, where the maximum rises to 400 hectares.

The owner of land subject to compulsory purchase may keep only a farm-house adapted to direct working of the farm. However an exception is made in favour of large agricultural enterprises "of the superior industrial type"; their owners will be permitted to retain either the whole property, or such portion as may be indispensable to assuring the production of seed, the breeding of cattle, etc. Before proceeding to compulsory sale, a delay of thirty days will be granted to the owner, during which time he may propose to the State a sale by private contract. In the case of compulsory sale, the owner will receive compensation equal to half the average value of the property in the district where it is situated. Lastly, the stock is not subject to compulsory sale, and for the improvements made and the capital invested in the land compensation may be granted.

The division into classes modifies to a certain extent the radical character of the reform, for the State can only proceed to expropriation or compulsory sale of any class after having exhausted all the preceding classes. It is probable, therefore that it will not avail itself of all the resources placed at its disposal by the law, or at any rate not until a considerable time has elapsed.

PORTUGAL.

INTRODUCTION OF THE "HOMESTEAD" SYSTEM. — *Diário do Governo*. Lisbon, 16 September 1920.

As an efficacious method of protecting small agricultural properties, which being intensively cultivated have proved to be greatly superior, from the economic and social point of view, to the great estates on which large scale cultivation is practised, the "homestead" system has been introduced into Portugal by the Decree No. 7:033, dated 16 October 1920.

According to the provisions of this decree the homestead is composed of a house, or a part of house serving as a dwelling, together with one or more pieces of land adjoining it or not more than a kilometre distant from it.

Husband and wife may form a homestead out of property which they

hold jointly ; or either out of his or her own property ; or the husband, with the authorization of the wife, out of property belonging to the wife which he administers ; or grandparents out of their joint property or either of them out of his own property ; or any persons who have property but have not descendants may create a homestead in favour of other persons.

The persons who may benefit by the creation of a homestead are the legitimate descendants of the founder of the homestead, his illegitimate descendants (provided they are not the offspring of an adulterous or incestuous union), orphans or foundlings whom he has received into his house or who have been placed in a charitable institution, and heads of families of either sex who are legally married and have at their charge descendants or other relatives or orphans or foundlings.

The decree also authorizes the State and administrative bodies to create homesteads in favour of needy heads of families on uncultivated land belonging to them. Preference must be given to those who reside in the locality in which the lands on which dwellings are to be constructed are situated. Homesteads may also be created in favour of soldiers and sailors who are married and have taken part in the campaigns in Africa or in France.

If for two successive years the homestead remain uninhabited and unproductive, it will lose its special character ; if only a part of it remain uninhabited and unproductive, that part of it will lose its special character.

The maximum value of the property which may compose a homestead at the time of its creation is fixed at 10,000 milreis. The decree lays down, however, that the value of the homestead may be increased by subsequent purchases to the amount of 15,000 milreis. When the estimated value of the homestead at the moment of its creation, or the value of the subsequent purchases, exceeds the limit laid down the homestead loses its special character as far as the excess value is concerned.

A homestead can only be formed of rural property which belongs to the person who creates it, which is not burdened by any mortgage, legal or contractual, against which there is no claim pending, which is not subject to any right of occupation, which has not been pledged, which is not under distraint, and upon which there are no charges other than dues, emphyteusis or dowry charges.

A property held in emphyteusis may be comprised within a homestead at the time it is created without the consent of the landlord, provided this does not result in a division of the land so held.

A family may not possess more than one homestead, except in the case where husband and wife live apart, each with part of the children or other descendants.

The homestead may be created by deed, by will, or by judicial authorization. It is indivisible and cannot be alienated, either voluntarily or compulsorily, except in the case of expropriation for reasons of public utility. The Decree also lays down that the land, the produce, the machinery, the live stock and the implements used in the cultivation of the land

cannot be pledged or distrained upon except for debts contracted prior to the creation of the homestead by the person who created it, provided such debts are shown by authentic documents or are recognized by a judicial sentence to have existed, for loans obtained by the possessor of the homestead from a co-operative agricultural credit society for the cultivation of the land, for the annual rent payable to the landlord in respect of land held in emphyteusis, or for taxes due to the State.

For the payment of rent or for taxes only half the produce can be pledged or distrained upon.

Rent which has been due for more than two years is not recoverable.

The homestead may be transferred by gift or may be bequeathed to descendants of the owner, or if he has no descendants, to other persons dependent upon him.

The creation of a homestead ceases to be valid if the possessor reaches 45 years of age without being married or without having received into his house an orphan or foundling.

On the death of husband or wife who possesses the whole of a homestead or is part possessor, leaving children under age, the judge can, on the application of the surviving parent, of the guardian, of the eldest son, or of the family council, order that the homestead shall remain undivided until the youngest child is of age and determine, if necessary, the payment of an indemnity in anticipation of the share due to those heirs who are or may become of age and do not benefit by the homestead.

In cases where the homestead is maintained undivided, it remains also inalienable, as laid down in the decree.

If the surviving parent is joint possessor of the homestead and lives in it, he or she has the option to claim complete possession of the homestead, to the exclusion of the heirs, in which case the value of the shares to which they are legally entitled must, where necessary, be paid in money to the heirs.

The surviving parent enjoys this right when all the descendants are over age and the homestead is maintained undivided, or when some of the heirs are under age and the application to postpone the division has been refused.

The special rules of procedure for the creation of a homestead are contained in regulations approved by Decree No. 7:034 of 16 October 1920.

SPAIN.

THE "JUNTA CENTRAL DE COLONIZACIÓN Y REPOBLACIÓN INTERIOR". — *Gaceta de Madrid*, No. 288, 14 October 1920.

The Royal Decree of 8 May 1920, by which the Ministry of Labour was formed, provided for the incorporation in that department of all the institutions dependent on other ministries whose functions included the study of social questions. And to give a greater impulse to the new Ministry it was also enacted that its functions should be amplified by placing under its direction certain institutions of a kindred nature which might

serve to complete their work. The expediency of this arrangement was soon proved with regard to the *Junta Central de Colonización y Repoblación Interior*, appointed by the Law of 30 August 1907 to make experiments in colonization on inalienable lands belonging to the State or to communes. Until that time the *Junta* had been under the *Ministerio de Fomento*, and its work had been extensive and efficacious, as is proved by the numerous agricultural colonies which it had formed. The recognition of this fact together with the necessity now universally acknowledged that the public authorities should by every possible means encourage the increase of production, has led the Government to the decision to entrust the *Junta de Colonización* with more ample powers, requiring from it to bring about changes in the cultivation of the largest possible extent of such land as may be susceptible of improvement, while safeguarding the interests of the proprietors.

For the discharge of these more important functions it was considered more fitting that the *Junta* should be attached to the Ministry of Labour, with which are connected, as we have said, all the institutions for studying and inquiring into the most varied social questions, and it was accordingly enacted by Royal Decree of 13 October 1920 that:

(1) The *Junta de Colonización y Repoblación Interior*, constituted by the Law of 30 August 1907, shall henceforth be placed under the Ministry of Labour.

(2) The functions and duties which by the same law and by the regulations for carrying it out were entrusted to the Presidency of the Council and to the *Ministerio de Fomento* shall be considered transferred to the Ministry of Labour.

(3) The credit of 1,500,000 pesetas for general expenses entered in the estimates of the *Ministerio de Fomento* shall be transferred to those of the Ministry of Labour.

UNITED STATES.

THE NUMBER OF FARMS IN 1920, 1910 AND 1900. — FOURTEENTH CENSUS OF THE UNITED STATES, 1920: AGRICULTURE: NUMBER OF FARMS, BY STATES AND COUNTIES, 1920, 1910 AND 1900. Department of Commerce, Bureau of the Census. Washington, 1920.

The following table shows, by states, the number of farms in the United States in 1920, 1910 and 1900. A "farm" for census purposes is all the land which is directly farmed by one person, either by his own labour alone or with the assistance of members of his household or hired employees. When a landowner has one or more tenants, renters, croppers, or managers, the land operated by each is considered as a farm. The figures for 1920 are subject to correction.

Number of Farms, 1920, 1910, 1900.

State	Number of Farms			Increase or Decrease (—)			
				1910-1920		1900-1910	
	1920	1910	1900	Number	Per cent.	Number	Per cent.
Alabama	256,023	262,901	223,220	6,878	2.6	39,681	17.6
Arizona	10,816	9,227	5,809	1,589	17.2	3,418	58.8
Arkansas	232,602	214,678	178,694	17,924	8.3	35,984	20.1
California	117,690	88,197	72,542	29,493	33.4	15,655	21.6
Colorado	59,991	46,170	24,700	13,821	29.9	21,470	86.9
Connecticut	22,635	6,815	26,948	4,160	15.5	133	0.5
Delaware	10,128	10,836	9,687	708	6.5	1,149	11.9
District of Columbia	203	217	269	14	6.5	52	19.3
Florida	54,006	50,016	40,814	3,990	8.0	9,202	22.5
Georgia	310,737	291,027	224,691	19,710	6.8	66,336	29.5
Idaho	42,100	30,807	17,471	11,302	36.7	13,336	76.3
Illinois	237,153	251,872	264,151	14,719	5.8	12,279	4.6
Indiana	205,124	215,485	221,897	10,361	4.8	6,412	2.9
Iowa	213,312	217,044	228,622	3,732	1.7	11,578	5.1
Kansas	161,287	177,841	173,098	12,554	7.1	4,743	2.7
Kentucky	270,676	259,185	234,667	11,491	4.4	24,518	10.4
Louisiana	135,455	120,546	115,959	14,909	12.4	4,577	3.9
Maine	48,228	60,016	59,299	11,788	19.6	717	1.2
Maryland	47,908	48,923	46,012	1,015	2.1	2,911	6.3
Massachusetts	31,982	36,917	37,715	4,935	13.4	798	2.1
Michigan	196,647	206,960	203,261	10,313	5.0	3,699	1.8
Minnesota	178,588	156,137	154,659	22,451	14.4	1,478	1.0
Mississippi	272,437	274,382	220,803	1,945	0.7	53,575	24.3
Missouri	263,124	277,224	284,886	14,120	5.2	7,642	2.7
Montana	57,441	26,214	13,370	31,227	119.1	12,844	96.1
Nebraska	126,309	129,678	121,523	3,369	2.6	8,153	6.7
Nevada	3,164	2,689	2,184	475	17.7	505	23.1
New Hampshire	20,423	27,053	29,324	6,530	24.1	2,271	7.7
New Jersey	20,672	33,487	34,650	3,815	11.4	1,163	3.4
New Mexico	29,841	35,076	13,911	5,835	16.4	23,365	189.8
New York	193,060	215,597	226,720	22,537	10.5	11,123	4.9
North Carolina	269,740	253,725	224,637	16,015	6.3	29,088	12.9
North Dakota	77,693	74,360	45,332	3,333	4.5	29,028	64.0
Ohio	256,699	272,045	276,719	25,346	5.6	4,674	1.7
Oklahoma	191,731	190,192	108,000	1,539	0.8	82,192	76.1
Oregon	50,188	45,502	35,837	4,686	10.3	9,665	27.0
Pennsylvania	202,256	219,295	224,248	17,039	7.8	4,953	2.2
Rhode Island	4,084	5,292	5,498	1,208	22.8	206	3.7
South Carolina	195,664	176,434	155,355	16,230	9.2	21,079	13.6
South Dakota	74,564	77,644	52,622	3,080	4.0	25,022	47.6
Tennessee	232,691	246,012	224,623	6,679	2.7	21,389	9.5
Texas	435,666	417,770	352,190	17,896	4.3	65,580	18.6
Utah	25,664	21,676	19,387	3,988	18.4	2,289	11.8
Vermont	29,071	32,709	33,104	3,637	11.1	295	1.2
Virginia	186,011	184,018	167,886	1,993	1.1	16,132	9.6
Washington	66,283	56,192	33,202	10,096	18.0	22,990	69.2
West Virginia	87,289	96,685	92,874	9,390	9.7	3,811	4.1
Wisconsin	189,196	177,127	169,795	12,069	6.8	7,332	4.3
Wyoming	15,611	10,987	6,095	4,624	42.1	4,892	80.3
United States total	6,349,998	6,361,502	5,737,372	88,496	1.4	624,130	10.9

MISCELLANEOUS QUESTIONS

BRAZIL. •

THE AGRICULTURAL AND ECONOMIC DEVELOPMENT
OF BRAZIL.

OFFICIAL SOURCES:

- SIMÕES LOPES (Dr. Ildefonso), Ministro da Agricultura, Industria e Commercio: Relatório apresentado ao Presidente da Republica. Rio de Janeiro, 1920.
- DIAS (Dr. Martins), Director do Serviço de Agricultura Pratica: A Produção das nossas terras. Ministerio da Agricultura, Industria e Commercio. Rio de Janeiro, 1915.
- ANNUAIRE STATISTIQUE DU BRÉSIL. 1^{ère} Année (1908-1912). Vol. I. Territoire et population. Vol. II. Économie et finances. Ministère de l'Agriculture, Industrie et Commerce. Direction Générale de Statistique. Rio de Janeiro, 1916 and 1917.
- PORTO (Hannibal): Pêlo algodão no Brasil. Conferencia realisada na cidade de Mossoró, Rio Grande do Norte, e otros trabalhos de propaganda da 1^a Conferencia Nacional Algodoeira. Sociedade Nacional de Agricultura. Rio de Janeiro, 1917.
- ESTIMATIVA DA PRODUÇÃO DO MILHO NO BRAZIL (SAPRA DE 1916-17). — Trabalho commemorativo da 4^a Exposição Nacional de Milho, realisada no Rio de Janeiro de 14 a 25 agosto 1918. Ministerio da Agricultura, Industria e Commercio. Directoria Geral de Estadística. Rio de Janeiro, 1918.
- MOVIMENTO ECONOMICO DO BRASIL. DADOS ESTATISTICOS. Ministerio da Agricultura, Industria e Commercio. Rio de Janeiro, 1918.
- WHAT BRAZIL BUYS AND SELLS. Ministry of Agriculture, Industry and Commerce. Rio de Janeiro, 1918.
- DE CAMPOS (Dr. Deodécio): Relatórios commerciaes e economicos do Addido Commercial a' Embaixada do Brazil na Italia. In: *Boletim do Ministerio das Relações Exteriores*, 1919-20. Rio de Janeiro.
- O CAFÉ. ESTATÍSTICAS DE PRODUÇÃO E EXPORTAÇÃO, 1919. Secretaria da Agricultura, Commercio e Obras Publicas do Estado de São Paulo. Directoria da Industria e Commercio. S. Paulo, 1919.
- ANNUAIRE INTERNATIONAL DE STATISTIQUE AGRICOLE, 1917 ET 1918. Institut International d'Agriculture. Service de Statistique Générale. Rome, 1920.
- COMMERCE EXTERIOR DO BRAZIL. MOVIMENTO MARITIMO. MOVIMENTO BANCARIO. JANEIRO A DEZEMBRO, 1915, 1916, 1917, 1918, 1919. Directoria de Estadística Commercial (Ministerio da Fazenda). Rio de Janeiro, 1920.
- MENSAGEM DO EXM. SR. DR. EPITACIO PESSOA, PRESIDENTE DA REPUBLICA DOS E. U. DO BRAZIL, APRESENTADA AO CONGRESSO NACIONAL, 1920.
- MESSAGE PRÉSENTÉ AU CONGRÈS LÉGISLATIF LE 14 JUILLET 1920 PAR SON EXCELLENCE M. WASHINGTON LUIS, PRÉSIDENT DE L'ÉTAT DE S. PAULO. 1920.
- LA SITUATION ÉCONOMIQUE ET FINANCIÈRE DU BRÉSIL. Compte rendu du Délégué du Brésil (J. A. Barboza Carneiro) à la Conférence financière de Bruxelles. 1920.
- Boletim da Directoria de Industria e Commercio*. Secretaria da Agricultura, Commercio e Obras Publicas do Estado de São Paulo. S. Paulo. Years 1916, 1917, 1918, 1919 and 1920.
- Boletim do Ministerio da Agricultura, Industria e Commercio*. Rio de Janeiro, Year 1920.

Boletim da Agricultura, Commercio e Industria. Bahia.

Boletim tecnico da Secretaria do Estado dos Negocios das Obras Publicas. Porto Alegre.

Boletim do Museu Goeldi. Belém (Pará).

Diario Oficial. Rio de Janeiro.

OTHER SOURCES :

DELGADO DE CARVALHO (C. M.) : *Le Brésil Méridional (Étude économique).* Paris, E. Desfosses, 1910.

WALLÉ (Paul) : *Au Brésil.* Paris, 1912.

ANNUAIRE DU BRÉSIL ÉCONOMIQUE, 1913. Rio de Janeiro, *Le Brésil Économique*, 1913.

DENIS (Pierre) : *Brazil* London, Fisher Unwin, 1913.

SOUSA DANTAS (Fernando) : *Les minerais de fer du Brésil.* Paris, Dounod, 1917.

COSTA (Dr. Affonso) : *Questões economicas* Rio de Janeiro, 1918

BRAGA (Dr. Cincinato) : *Séccas do Noroeste e reorganização economica.* Rio de Janeiro, Imprensa Nacional, 1919.

CARVALHO (Fyisio de) : *Brasil potencia mundial.* Rio de Janeiro, 1919.

PORTO (Dr. Hannibal), Membro da Delegação commercial brasileira na Inglaterra : *O Brazil em face da Inglaterra industrial*, 1919.

BIANCO (Francesco) : *L'Italia e il Brasile.* Milan, Treves, 1920.

BLAND (J O P.) : *M.C.N. Manners and Morals in South America.* London, 1920.

BONACCI (Giovanni) : *Nel Brasile.* Firenze, Ariani, 1920.

LANZONI (P.) : *Geografia economica commerciale.* 2^a Europa-America. Milan, Hoepli, 1920.

OAKENFUL (J. C.) : *Brazil, Past, Present and Future.* London, 1920.

THE STATESMAN'S YEAR BOOK, 1920 London, Macmillan and Co, 1920.

LE BRÉSIL. In : *Moniteur des Intérêts Matériels.* Bruxelles No. 77 of 1919: Nos. 262, 274, 290 and 301 of 1920, and Nos. 15 and 16 of 1921.

BRAZIL. In : "South America as a Field for Travel," published by the *South American Journal.* London, January 1921.

La Tribuna coloniale. Rome Years 1919 and 1920.

Revista Commercial, Industrial e Agrícola do Pará. Belém (Pará).

Brazil, which is a vast country, stretching from north to south under the influence of the most varied climates and therefore adapted to receive as immigrants persons from every region in the world, which is rich in fertile lands and raw materials and possesses natural resources which in many districts are almost untouched, which has numerous rural centres and great seaports full of intense commercial activity, has made remarkable strides in recent years. The increase of its population (1), which, though always disproportionate to the immensity of the country, has risen in the last thirty years from 15,000,000 to about 30,000,000, the extension of its railway system and of its services of navigation by sea and by river, the diffusion of technical and agricultural instruction, are amongst the principal causes of its economic development. We propose briefly to illustrate this development.

(1) Since the beginning of last century the number of inhabitants has shown a constant and rapid increase. In 1818 the population was estimated at 3,817,000. In 1872 it has reached 10,112,061. A little later, soon after the war with Paraguay, it rose to over 11 millions. The census of 1890 showed a population of 14,333,915 and that of 1920 a population of 17,318,556. In 1917 the population was calculated at 27,473,579.

§ I. THE PRINCIPAL AGRICULTURAL PRODUCTS AND THE RAISING OF LIVE STOCK.

As far as agriculture is concerned, Brazil may be divided into three great regions, corresponding approximately to its climatic zones, viz: (1) the basin of the Amazon, covered with immense forests and rich in valuable woods; (2) the Brazilian plateau, a region adapted to cereal-growing and stock-farming; (3) the coast region, which is adapted to all kinds of crops, from cotton and coffee in the north to cereals in the south.

The land, thanks to the variety of climate and of altitude, is generally so fertile as to render possible an abundant and varied vegetation. In particular, on the plateau, west of the Serra do Mar, owing to a variety of favourable conditions, it is possible not only to cultivate almost all the crops of the temperate zone of Europe and many sub-tropical crops, but to have an almost continuous vegetation and production.

Of the agricultural products the most important is coffee,* which forms the basis of the wealth of the country. Prior to the War, the average world production of coffee amounted to 23 million bags — a bag is 60 kilogrammes in weight — and of these fully 19 million bags were produced in Brazil, whose virgin lands, cleared of forests by burning and fertilized by the resulting ashes, lend themselves admirably to the cultivation of this crop. The principal centres of coffee-cultivation are the States of S. Paulo, Rio de Janeiro, Bahia, Espirito Santo and Minas Geraes. In 1916-17, 7,732,804 quintals of coffee were produced in Brazil and in 1917-18 the production was 9,850,200 quintals. For a long time coffee accounted for three fourths of the exports. The area under coffee in the whole of Brazil is estimated to amount to 1,800,000 hectares.

Another product of which the cultivation is steadily increasing is sugar cane, so that raw sugar now represents, in value, one of the principal articles of export. The production of cane sugar from 1912-13 to 1918-19 was as follows:

Year	Quintals	Year	Quintals
1912-13	1,468,322	1916-17	2,436,991
1913-14	1,580,381	1917-18	2,518,482
1914-15	1,962,437	1918-19	3,996,000
1915-16	1,897,540		

It may be said that the whole of Brazil is adapted to the cultivation of sugar cane. The principal sugar-producing States are Rio de Janeiro, Bahia, Sergipe, Alagoas, Pernambuco, Parahyba and Rio Grande do Norte.

Even more important are cocoa, which is produced in Bahia and between this State and the basin of the Amazon, and in the production of which, at any rate as far as quantity is concerned, Brazil has become one of the first countries of the world, and maté, which is the great source of wealth of the southern States.

Other crops which are cultivated in Brazil are manioca, maize (the production of which amounted in 1916-17 to 51,746,494 quintals, the area cultivated being 3,058,043 hectares), wheat (of which 1,004,400 quintals were produced in 1917-18 and 1,200,000 quintals in 1920-21), black beans, rye and rice. Formerly Brazil imported large quantities of rice and exported such small quantities that one could not speak of a real exportation. In five years the situation changed in the following manner:

Imports of rice		Exports of rice	
1910 . . .	kg. 17,320,437	1910 . . .	kg. 51,623
1916 . . .	» 714,353	1916 . . .	» 1,315,372
1917 . . .	» 35,412	1917 . . .	» 44,638,866
1920 . . .	—	1920 (first eleven months)	» 130,528,000

The cultivation of black beans in Brazil has increased in a remarkable manner. The production was more than 350,000 tons in 1919, of which 180,000 tons were produced in S. Paulo, 60,000 tons in Rio Grande do Sul, and 31,000 tons in Minas Geraes. The figures showing the exports in recent years are particularly interesting. In 1913 the exports of beans amounted to 3,930 kilogrammes, of the value of 1,648 milreis (1); two years later, in 1915, the exports reached 276,150 kilogrammes to the value of 99,724 milreis; in 1916 it increased to 45,593,944 kilogrammes to the value of 13,763 contos of reis (2) and finally, in 1917, it reached 93,427,753 kilogrammes to the value of 40,552 contos. During the first quarter of 1919, the exports were maintained in the same proportions as in 1917, being 28,104 tons of the value of 13,042 contos (3). These figures are the more remarkable inasmuch as, in 1912, Brazil was obliged to import 9,407,080 kilogrammes of black beans for its own consumption.

In agriculture the most progressive of all the States is S. Paulo, in which it is conducted on modern lines and has in some branches reached perfection. The cultivation of coffee, practiced with all modern technical means, has attained in S. Paulo results which are truly remarkable. It may be said that perhaps in the history of agricultural progress there is nothing comparable to the brilliant and daring policy pursued and the constant efforts made by the State of S. Paulo to improve the cultivation

(1) The paper milreis is equal to 1,68 francs at par.

(2) A conto of reis (paper) = 1000 milreis (paper).

(3) In regard to the production of cereals it is worth noting that by a Decree of 9 March 1918 a premium on the cultivation of wheat in 1918 and 1919 was granted to farmers, companies and co-operative societies. The premiums take the form of machines and implements, and amount to 30 milreis per hectare. They are paid if the crop exceeds 15 hectolitres of wheat per hectare, and weighs 78 kilogrammes to the hectolitre. If the crop exceeds 20 hectolitres per hectare and if also the weight is greater, the premium is increased by 20 per cent. Inspectors were appointed to help the farmers to prepare the land and the seed, to use machinery and to apply rational methods in harvesting and storing the grain.

of coffee, to extend its use and to give it an ever-increasing importance in the world-market.

On the other hand, in S. Paulo stock-farming, as we shall see shortly, and the cultivation of cereals are becoming not less important than coffee. On the agricultural production of this State we possess the following data, taken from official sources :

TABLE I. — *Agricultural Production of the State of S. Paulo*
(in quintals).

Products	1914-15	1915-16	1916-17	1917-18	1918-19
Coffee	5,523,904	7,026,720	5,962,737	7,326,090	4,351,950
Raw cotton	130,483	244,895	337,414	552,777	1,653,897
Sugar	270,144	307,975	311,462	119,070	244,712
Tobacco	17,997	23,740	28,574	17,410	19,547
Rice	584,086	1,127,514	1,503,451	1,781,461	1,951,758
Beans	1,507,623	1,818,399	1,501,933	1,815,323	2,043,212
Maize	6,332,278	6,320,411	7,037,510	7,910,446	7,989,790

From the foregoing table we see that there has been a considerable increase in the production of cotton. The diminution of the coffee-crop in 1918-19 was due to severe frosts which damaged the plantations. The increase in the production of rice is noteworthy ; it was more than trebled in five years.

Agriculture is also flourishing in the State of Rio Grande do Sul, where the cultivation of rice and other cereals is largely carried on. We shall have occasion to speak further of this State, in which the organization of the agricultural services and, in general, of all the public services, has attained a high degree of perfection.

Fruit-growing also seems destined to have a great future in Brazil, particularly the growing of those varieties of fruit which belong to the temperate zones, as they ripen at a time of year (winter and spring) in which such fruits are altogether wanting in the northern hemisphere. Specially noteworthy are the cultivation of oranges, fairly widely diffused in the States of Bahia and Rio Grande do Sul, and vine-growing, which gives promise of becoming important in the more Southern States (Rio Grande and Santa Caterina).

Of textile plants the most important is cotton, which is cultivated mainly in the North-Eastern States and constitutes an important article of export (about 200,000 quintals per annum), although an ever-increasing part of the cotton crop is absorbed by the national industry, which is steadily developing. Regarding the increase of cotton cultivation, we give the fol-

lowing figures, taken from the Year Book of the Department of Agriculture of the United States :

	Quintals of fibre
Average 1909-1913	630,000
Year 1914	835,000
» 1915	954,000
» 1916	911,000
» 1917	973,000

These figures indicate that the cultivation of cotton is increasing. For 1918-19 there is an official statement (1) that the crop in that year in the whole country amounted to 1,396,020 quintals of fibre.

In Bahia and the adjoining States towards the north-east and latterly also in Rio Grande do Sul tobacco is cultivated on a large scale.

The principal natural characteristic of Brazil is the virgin forests or *silvas* which, notwithstanding the continual clearing, still occupy more than three fourths of the whole area. They supply not only a great quantity of wood for building purposes and for cabinet-making, but above all rubber, which is second in importance of the economic resources of Brazil and, after coffee, the second article of export. In the production of rubber Brazil occupied, until a few years ago, the premier place in the world, but it now comes second to Asia and at a considerable distance from it. In regard to the production of rubber in Brazil we have the following data (2):

Year	Tons	Year	Tons
1900	26,750	1917	39,370
1905	35,000	1918	30,700
1910	40,800	1919	34,285
1915	37,220	1920	35,000

Rubber is produced almost exclusively, by tapping, from the tree *Hevea brasiliensis* which the natives call *borracha*, *seringa* or *cautchú* and which grows spontaneously in great quantities in the basin of the Amazon. This rubber, which is the finest known, is put on the market as Pará rubber, so called from the city of Pará or Belém where it is for the most part collected for export. Rubber is also beginning to be obtained elsewhere as, for example, from the *Maniçoba* or *Manihot* of Ceará and from the *Mangabeira* of the State of S. Paulo.

Stock-farming and in particular cattle-raising has, for some time past, assumed great importance. In the number of cattle (30 millions in 1917) Brazil now competes with Argentina and sometimes surpasses it. Cattle-raising is chiefly carried on in the States of Rio Grande do Sul, Matto

(1) *Boletim do Ministerio das Relações Exteriores*, Rio de Janeiro, No. 1 of the year 1919.

(2) See the *Moniteur des Intérêts Matériels*, No. 21, Brussels, 21 January 1921.

Grosso, Goyaz, Minas Geraes and Paraná. Matto Grosso in particular seems destined to become one of the most important centres of stock-farming in the world. The number of head of live stock in 1916 in the whole of Brazil were as follows :

Cattle.	28,962,180
Pigs	17,329,210
Sheep.	7,204,920
Goats	6,919,550
Horses	6,065,230
Asses and mules	3,221,910
Total	69,703,000

In regard to the State of S. Paulo, we give the following figures taken from the census of live stock recently taken (1) :

Pigs	4,989,574
Cattle.	3,108,205
Horses	551,005
Asses and Mules	428,348
Goats	366,048
Sheep.	106,061

or 9,549,241 head of stock in all. The State of S. Paulo aims at promoting stock-farming on progressive lines.

Basing our conclusions on official figures, taken from the most recent sources, we may affirm that both agriculture and stock-farming are constantly progressing. Coffee remains, undoubtedly, the basis of the wealth of the country, but side by side with it, other forms of production are being developed with great rapidity and on such a large scale that they will probably soon become sources of wealth not less important. Moreover new crops, formerly unknown, are being introduced, such as olives and vines; forms of cultivation which were once flourishing but had declined, such as cereals and sugar-cane, are being revived and new impulse is being given to them. The dependence upon a single crop, coffee, is beginning to give place to the cultivation of many crops. In the State of S. Paulo, the economy of which was at one time based on coffee-growing alone, it became last year one of the fundamental principles of the Government to develop the cultivation of a variety of crops. And this is, in fact, a characteristic tendency of the rural economy of Brazil at the present time.

(1) See the Message presented to the Legislative Congress on 14 July 1920 by H. E. Luis Washington, President of the State of S. Paulo.

§ 2. INDUSTRIAL ACTIVITY.

Equally with agriculture, industry is being organized and is progressing. Since the proclamation of its independence, Brazil has given every possible encouragement to industry. Towards the end of the nineteenth century a certain industrial activity was noticeable, but it was little more than early efforts to produce a limited number of articles, such as bags (of which great quantities are used in the export of coffee), hats, boots, cotton and silk stuffs. It was, above all, the War which, by cutting off the possibility for the Brazilians to obtain supplies of many articles from Europe or from North America, obliged them to depend upon themselves, and provoked an industrial movement in Brazil which, particularly if we take account of the short time since it started, is very remarkable.

In 1914 there were in Brazil 13,342 factories; in 1916 the number had risen to 26,493. The most important industries were tobacco manufacture, brewing, boot-making, hat-making and cotton-weaving. The output of manufactured goods was estimated at about a million contos, more than one fourth being produced in the State of S. Paulo.

Amongst the industries which have so far attained the greatest progress are the manufacturing industries and particularly the textile industries. From statistics prepared for the Montevideo Exhibition of last year, we take the following figures which indicate clearly the importance of the Brazilian textile industry: 45,000,000 kilogrammes of cotton are manufactured annually, in factories having 1,512,626 spindles, 51,134 looms and motive power of 94,562 H.P. and employing 82,257 persons. About 460,000,000 metres of cotton stuffs are annually produced. The value of cotton stuffs produced rose from 121 milcontos in 1905 to 275 milcontos in 1915 — an increase of 127 per cent. During the War, the rate of increase was appreciably higher, although there was a shortage of labour and the necessary machinery could not be obtained from Europe. To-day in the quantity of cotton stuffs produced Brazil will bear comparison with the most advanced countries, and it has even begun to export cotton stuffs on a considerable scale to the other South American republics.

There are also in Brazil 25 woollen mills, with 19,366 spindles and 1,324 looms, employing a minimum of 3,745 workers. The annual production is valued at 46 million francs.

Besides the weaving of cotton and wool, which have made an excellent start, must also be mentioned the jute industry, for the making of the bags which are used in the exportation of coffee.

In regard to the situation of the Brazilian spinning and weaving mills we give the following figures, taken from a statistical report published by the Ministry of Agriculture, Industry and Commerce in 1918, but relating to 1915:

TABLE II. — *Situation of the Spinning and Weaving Mills in 1915.*

	Number of mills	Capital	Number of workers	Value of goods produced
Cotton	240	278,780 : 000\$000	82,257	275,556 : 000\$000
Wool	35	11,230 : 000\$000	2,745	19,332 : 000\$000
Jute	16	38,030 : 000\$000	5,620	32,440 : 000\$000
Silk	13	3,805 : 000\$000	1,357	5,160 : 000\$000
Total . . .	304	331,845 : 000\$000	91,979	332,488 : 000\$000

The mining industries, too, are steadily developing. Up to now Brazil was wanting in coal, but researches and recent experiments show that its numerous mines contain coal in considerable quantity and of a quality adapted to all industrial uses. Already there is considerable activity in coal-mining; on the average about 400,000 tons are extracted annually (1). The production of useful minerals is now more promising than was formerly the production of the precious minerals. The most important metal is iron, which is chiefly obtained in the State of Minas, where there are 60 deposits, of various sizes, of solid haematite. In all the quantity of iron as ascertained up to the present to exist in the mines of Minas Geraes, S. Paulo, Santa Catherina, Rio Grande do Sul, Spirito Santo, Matto Grosso and Goyaz may be estimated at 3,000,000,000 tons. These resources have so far been worked only on a limited scale, but proposals are being initiated for the effective working of the mines, which will enable the Federal Government to carry out a scheme recently laid before the Brazilian Chamber for the construction of 170,000 kilometres of railway and 500,000 tons of merchant vessels.

In the *Diario Official* of 1 April 1918 decrees were published containing special provisions for fostering the iron industry and the extraction of coal. We refer to them in order to give an idea of the manner in which the Federal Government encourages the industrial movement.

As regards the iron industry, it was provided that loans should be granted up to the amount of the initial capital, to firms which at the time of the publication of the decree were smelting iron or to firms which, within the space of three years, establish ironworks with blast furnaces or electric furnaces, the works themselves being mortgaged in favour of the Government.

(1) Brazil surpasses all other countries in its water-power, which is estimated at 30,000,000 H. P. The Falls of Iquassú on the River Paraná have a volume of water double that of the Niagara Falls.

The granting of loans is dependent upon production, which must not be less than 20 tons per day; it is also insisted that the works shall be kept in working order and in a perfect state of repair. The maximum amount of the loan is fixed at 5,000 contos for each works. Interest of 5 per cent. will be paid on the loan. The maximum length of time for which loans will be given is 12 years. The loans will be issued as soon as the mortgage has been registered, and will be repayable in 10 equal instalments, including interest, the first instalment being payable at the end of the year following that in which the mortgage was registered. Repayments may be made, wholly or in part, with materials produced in the works, up to a maximum of one third of the production. The Government, besides other facilities, may subsidize the construction of short lines of railways, to serve for the transport of raw material and of the manufactured articles produced in the works. The encouragement given to coal-mining, which is intimately connected with the iron industry, is on practically the same lines.

Rich deposits of manganese, in the production of which Brazil is one of the leading countries in the world, are worked, chiefly in Minas and Matto Grosso. During the war, notwithstanding the enormous difficulties of obtaining workers and machinery, the exports of manganese steadily increased. Between 1913 and 1917 they rose from 122,300 tons to 532,855 tons. It is estimated that Matto Grosso alone contains 100 million tons of manganese ore.

The Brazilian Government is also arranging for the development of the petroleum resources of the country, and has voted substantial sums for carrying out the necessary researches. It has been ascertained that in the States of Alagoas, Pernambuco and Bahia there are 35 petroliferous districts, covering a total area of approximately 25,000 square kilometres (1).

We must also mention all the small industries necessary for the current needs of the population. These are flourishing in every town. Agriculture in particular has given rise to a number of factories which prepare products for consumption, such as the manufacture of tapioca (from manioc), in regard to which Brazil occupies the premier place amongst all countries, sugar refining, brewing, the preparation of maté and of vegetable oils; cheesemaking in Minas, Rio and Santa Catherina; milling and the manufacture of macaroni, etc. (Rio de Janeiro, S. Paulo); the preparation, in establishments known as "xarqueados," of dried and frozen meat, of which latter the exportation to Europe is steadily increasing (in 1917 it amounted to 66,452 tons); the rubber industry, which is steadily developing; tobacco-manufacture, etc.

For the sake of brevity we refrain from speaking of other forms of industrial activity but it may be said, in general, of the industrial movement of to-day that it has in great part emancipated Brazil from dependence

(1) See the *Boletim do Ministério das Relações Exteriores*, No 5, Rio de Janeiro. November 1919.

upon foreign production, particularly in regard to textile goods, hats and shoes. Thus, side by side with the transformation which has taken place in agriculture from dependence on a single crop to the cultivation of a variety of crops, there has occurred the development of large scale industry.

§ 3. FOREIGN TRADE.

Since 1808, the year in which the colonial régime ceased and freedom of commerce was introduced, the foreign trade of Brazil has shown a constant and rapid increase, in respect both of imports and of exports. To give an idea of it, we present the following table, in which is shown the value in *contos* of the total exports and imports from 1915 to 1919 (for a period, that is, comprising four years of war and the first year of peace) together with figures for previous periods for purposes of comparison:

TABLE III. — *Foreign Trade of Brazil,*
exclusive of re-exports (in contos).

Periods and years	Imports	Exports	Total	Excess of exports over imports
Average 1901-1905. .	474,708	760,244	1,234,952	285,536
Average 1906-1910. .	603,647	864,471	1,468,118	260,824
Average 1911-1915. .	779,486	980,694	1,760,180	201,208
1916	810,759	1,136,888	1,947,647	326,129
1917	837,738	1,192,175	2,029,913	354,437
1918	989,405	1,137,100	2,126,505	147,695
1919	1,334,259	2,178,719	3,512,978	844,460
Total . . .	3,972,151	5,644,882	9,617,043	1,672,721
Average . . .	993,040	1,411,220	2,404,260	418,180

The official statistics divide the articles imported into Brazil into four classes, as is shown in the following table, in which the figures represent *contos*.

TABLE IV. — *Classes of Goods Imported.*

Classes	1915	1916	1917	1918	1919
Live animals.	831	2,132	1,435	5,494	10,681
Raw materials.	153,777	239,739	252,544	259,918	341,062
Manufactured goods . .	209,054	343,090	386,942	443,522	659,847
Food stuffs and feeding stuffs	219,334	225,798	196,817	280,471	322,669
Total . .	582,996	810,759	837,738	989,405	1,334,259
In metric tons . . .	2,671,499	2,561,859	1,860,592	1,650,974	2,642,518

The principal imports are machinery, coal, cereals and manufactured articles.

The exports are divided into the three classes, as shown in the following table :

TABLE V. — *Classes of Goods Exported.*

Classes	1915	1916	1917	1918	1919
Animals and animal products . .	101,027	153,705	219,956	231,232	338,131
Minerals and mineral products. .	22,869	43,060	72,441	54,187	28,256
Vegetable products	918,401	940,124	899,778	851,681	1,812,333
Total in contos.	1,042,297	1,136,889	1,192,175	1,137,100	2,178,720
“ “ metric tons	1,809,381	1,870,921	2,016,722	1,771,853	1,907,688
Including vegetable products . .	1,420,986	1,248,331	1,321,909	1,202,510	1,494,120

The exports, which generally exceed the imports, consist principally of coffee, rubber, hides, maté, cocoa, tobacco, sugar and various minerals. Vegetable produce represents 78.2 per cent. of the quantity and 83.2 per cent. of the total value of the exports. This high percentage is largely due to the immense exports of coffee.

We now note the principal countries from which goods are imported with values expressed in *contos* :

TABLE VI. — *Principal Countries from which Goods are Imported.*

Countries	1915	1916	1917	1918	1919
United States.	187,873	317,661	394,890	355,932	640,511
Great Britain.	127,547	165,281	150,855	201,878	215,544
Argentina.	92,575	114,019	109,306	187,899	204,448
France	28,823	42,158	33,824	47,348	50,530
Portugal	28,879	37,704	27,242	37,903	39,718
India	10,829	13,150	18,254	12,349	30,329
Uruguay	8,591	12,061	16,193	41,266	29,602
Newfoundland	12,494	13,980	14,291	23,709	21,766
Italy.	25,528	28,303	16,608	21,054	18,261
Sweden.	5,132	10,525	7,472	9,398	15,174
Spain	8,432	9,422	11,305	17,486	14,727
Other countries	46,293	46,495	37,498	33,122	53,653
Total . . .	582,996	810,759	837,738	989,404	1,334,258

In 1919, 79.5 per cent. of the total imports came from three countries: the United States (48 per cent.), Great Britain (16.2 per cent.), and Argentina (15.3 per cent.). After these came France (3.8 per cent.), India (2.3 per cent.) and Uruguay (2.2 per cent.) The value of the goods imported from the United States in 1919 was three times as great as in 1915 and that of the goods imported from Argentina twice as great as in 1915.

The exports are directed to the following countries:

TABLE VII. — *Principal Countries to which Goods are Exported.*

Countries	1915	1916	1917	1918	1919
United States	427,924	520,499	532,731	393,896	901,814
France	116,501	178,654	157,220	102,416	463,793
Great Britain	125,056	131,116	149,303	114,802	157,752
Argentina	52,095	67,093	106,725	172,753	96,458
Uruguay	35,356	51,423	85,802	118,505	95,824
Belgium	—	—	—	5,760	79,524
Italy	32,126	68,102	92,370	120,998	66,773
Holland	63,052	33,763	5,988	—	64,788
Sweden	92,645	31,276	1,529	5,545	55,681
Denmark	23,530	8,468	3,073	1,790	40,517
Spain	6,007	8,993	15,907	25,421	35,084
Norway	30,783	6 103	5,639	9,494	17,373
Other countries	36,323	27,498	35,888	65,720	103,338
Total	1,042,298	1,136,888	1,192,175	1,137,100	2,178,719

Of the exports 70 per cent. are directed to three countries : the United States (41.4 per cent.) ; France (21.3 per cent.), and Great Britain (7.3 per cent.). After these come Argentina (4.4 per cent.), Uruguay (4.4 per cent.), Belgium (3.7 per cent.), Italy (3 per cent.) and Holland (3 per cent.). The United States have more than doubled the amount of their imports from Brazil since 1915 and France imports from Brazil exactly four times as much as she did in 1915.

Closely connected with the foreign trade is the movement of shipping since the great bulk of the foreign trade is carried on by sea. It is not yet proportionate to the length of the coast-line, but it is steadily increasing. We give figures showing the movement of shipping :

TABLE VIII. — *Number and Tonnage of Vessels
Entered Brazilian Ports.*

1. *Number*

Vessels	1915	1916	1917	1918	1919
Foreign . . .	4,095	3,657	2,751	2,898	3,818
Brazilian . . .	18,504	18,112	18,959	18,906	19,308
Total . . .	22,599	21,829	21,716	21,804	23,126

2. *Tonnage*

Foreign . . .	10,404	8,605	5,522	4,825	8,440
Brazilian . . .	9,001	6,623	8,959	9,691	9,514
Total in thousands of tons	19,495	17,228	14,481	14,516	17,954

The merchant marine in 1917 had a total displacement of 395,000 tons, of which 377,000 tons were steamers. We have already noted that a considerable increase of the merchant marine is contemplated in the programme of the Federal Government.

The principal port, furnished with modern equipment, is that of Rio de Janeiro, situated on the magnificent Bay of Guanabara, 30 kilometres long and 20 broad, and sheltered by the mountains which surround it from the winds and storms of the ocean. The vessels entered in 1919 totalled 4,687,966 tons. After Rio de Janeiro, the busiest ports in that year were Santos, 2,736,144 tons; S. Salvador (Bahia), 1,554,694 tons; Recife (Pernambuco), 1,549,059 tons; Belém (Pará), which is the nearest Brazilian port to Europe, and, together with the port of Manaus, forms the great commercial centre of the equatorial region of the interior, 630,723 tons; Maceió, 587,049 tons; Rio Grande, 517,377 tons; Paranaguá, 508,558 tons. The total of the vessels entered and cleared was 9,393,070 tons at Rio de Janeiro; 5,437,477 tons at Santos; 3,114,523 tons at S. Salvador, etc.

The Federal Government has also provided for the modernizing of the ports of Rio de Janeiro, Bahia, Pernambuco, Belém (Pará) and Rio Grande do Sul, which are the termini of the system of communications of which we have now to speak.

§ 4. ROADS AND MEANS OF COMMUNICATION.

In a large country, such as that of which we are speaking, the question of roads and of means of communication is of capital importance, and for this reason Brazil has in recent years devoted much attention to their development. Though they are still disproportionate to the vastity of the country they have at any rate attained considerable development in proportion to the population. The ordinary roads are not very numerous, but on the other hand there is an important network of railways. In 1870 there were 745 kilometres of railways in operation; in 1900, 15,316 kilometres; in 1910, 21,326 kilometres; in 1912, 23,491 kilometres and on 31 December 1919, there were 28,197 kilometres, not to speak of thousands of kilometres of railways which were in course of construction, for which surveys were being made, or which had been proposed. To-day, the existing railways exceed 30,000 kilometres in length. These figures prove that Brazil has fully understood that for the development of its natural resources it is indispensable to link the various industrial and agricultural centres with the seaports and to maintain constant, easy and frequent communications across the country. The principal railway line is the *Estrada de Ferro Central*, which runs from Rio de Janeiro to S. Paulo and has recently been extended to Porto Esperanza in Matto Grosso, the first section of a great line which will ultimately have its terminus on the Pacific coast. Another important line is that which runs from the port of Recife to the Falls of Paulo Alfonso, on the San Francisco River. A very busy line is the English-owned line which links San Paulo with Santos; it consists in great part, where it crosses the mountains of the Serra do Mar, of an imposing series of funicular railways. The Government always makes great efforts to develop the construction of roads suitable for wheeled traffic.

A large part of Brazil, as is well known, is traversed by a great network of navigable rivers, chief amongst which is the Amazon, with its numerous tributaries (length, 6,200 kilometres; area, 7,000,000 square kilometres; volume of water, 80,000 cubic metres per second). In its lower course, the Amazon resembles a sea; it has a larger volume of water than any other river in the world and it can be ascended by sea-going vessels as far as Iquitos in Peru. Its navigation was opened to the vessels of all nations in 1867 and several companies maintain regular services upon it. Besides the Parahyba, on which there is a moderate amount of traffic, and the San Francisco, of which the navigation is interrupted by the Falls of Paulo Alfonso, the tributaries of the River Plate, particularly the Paraná and its tributary the Parahiba, have considerable commercial importance.

Lastly we note that the Brazilian sea ports communicate regularly with one another by means of a perfectly organized coasting service, which also keeps them in communication with the various riverside ports.

§ 5. THE BANKING SYSTEM.

The banking system, like the roads and means of communication, is one of the surest indications of the prosperity of a country. For this reason, we think it desirable to dwell upon it. We give first, in the following table, the aggregate figures showing the chief items in the balance sheets of the principal banks doing business in Brazil in the period from 1915 to 1919. The figures represent contos of reis (paper).

TABLE IX. — *Aggregate Figures relating to the Operations of the Principal Banks doing Business in Brazil.*

	1915	1916	1917	1918	1919
ASSETS:					
Unpaid capital	82,666	83,491	95,032	113,078	149,288
Bills discounted	243,221	331,618	417,408	565,830	708,312
Advances on current account . .	389,160	462,384	549,044	801,635	1,091,242
Bills receivable	284,385	351,487	375,983	557,767	841,948
Sundry guarantees	644,497	702,507	707,265	818,806	1,124,188
Values deposited	925,953	1,002,469	1,127,096	1,336,107	1,522,005
Cash in hand	341,183	339,864	387,204	492,340	570,672
Other items	698,414	758,020	868,779	1,226,574	2,101,903
General total	3,609,479	4,031,840	4,527,811	5,912,137	8,109,558
Foreign banks	1,852,484	1,929,996	2,608,730	2,819,107	3,843,822
Brazilian banks	1,7 6,995	2,101,844	2,519,081	3,093,030	4,265,736
LIABILITIES:					
Share capital	323,228	333,277	362,072	426,940	487,794
Deposits at sight	439,883	575,467	710,023	1,059,353	1,195,922
Deposits at term	273,360	349,712	355,580	499,857	712,932
Values deposited on third parties .	1,818,756	1,986,042	2,141,181	2,501,331	3,037,249

These figures indicate a steady progress in the business of the banks, which corresponds to the increase in the volume of business which we have pointed out in speaking of the commercial and industrial development of the country. It is calculated that the banking business increased by 150 per cent. between 1913 and 1919.

The majority of the Brazilian and foreign banks operating in Brazil have their head offices and their most important branches in Rio de Janeiro, the federal capital, in the State of S. Paulo (S. Paulo and Santos) and in the States of Rio Grande do Sul and Minas Geraes. This is easily explicable, since the federal capital is the principal port and commercial centre

of the country, the State of S. Paulo is the greatest producer of coffee, in the State of Rio Grande do Sul agriculture and stock-farming are widely diffused and the State of Minas Geraes contains many mines.

We now give a table containing a list of the principal banks operating in the states mentioned, together with some figures extracted from their balance sheets on 31 December 1919, which will give a clearer idea of the business which they did in 1919. The figures are, as before, expressed in contos (paper).

TABLE X. — *Banks operating in Rio de Janeiro.*

	Share capital	Paid-up capital	Deposits at sight	Deposits at term	Balance sheet totals
Banco do Brasil	70,000	45,000	144,529	36,037	1,145,686
Banco Portuguez do Brasil . .	50,000	25,000	39,200	18,597	320,464
London and Brazilian Bank . .	26,667	13,334	15,345	11,099	213,192
The British Bank of South America	17,778	8,889	14,422	19,702	138,978
Brasilianische Bank für Deutsch- land	15,000	15,000	4,488	2,120	53,148
Banco Commercial	9,000	9,000	14,241	857	110,187
Banco do Commercio	7,000	7,000	9,266	1,346	86,299
Banco da Lavoura e do Com- mercio	5,000	5,000	3,143	—	51,092
Banco Mercantil do Rio de Ja- neiro	5,000	4,990	40,740	35,907	200,939
American Foreign Bank Corp- oration	4,613	4,613	2,824	313	36,666
The Royal Bank of Canada . .	3,933	3,933	5,945	702	21,088
Banco Allemão Transatlantico	3,675	3,675	2,666	1,325	29,410
The National City Bank . . .	3,082	3,082	50,499	14,271	328,380
Banco Nacional Ultramarino . .	3,000	3,000	26,290	30,089	335,688
Banco Germanico	2,205	2,205	6,501	—	28,447
Banco Hollandez	2,000	2,000	27,179	2,343	191,965
Banco Nacional Brasileiro . .	2,000	2,000	10,215	—	58,437
London and River Plate Bank	1,500	1,500	14,825	5,104	144,268
Banco Credito Rural	1,322	1,322	98	—	2,240
The Yokohama Specie Bank . .	1,000	1,000	1,170	679	6,141
Banco Español del Rio de la Plata	800	800	—	2,691	32,318
Banco da Provincia do Rio Grande do Sul	—	—	10,655	18,698	71,065
Banco Pelotense	—	—	—	8,011	33,766
Total . . .	234,575	162,343	444,241	209,891	3,639,864
Foreign banks . . .	135,253	88,031	211,354	109,035	1,880,153
Brazilian banks . . .	99,322	74,312	232,887	100,856	1,759,711

The Brazilian National Bank began operations in 1916; the Dutch bank in 1917; the Portuguese bank in 1918 and the American, Canadian and Japanese banks in 1919. All the other banks existed prior to 1915.

The two banks which figure last on the list and for which the capital is not indicated, are really branches of banks which have their head offices in the State of Rio Grande do Sul.

The volume of the ordinary business done by the banks varies very much. The Bank of Brazil, which is the oldest, takes first place in every class of operations. The total figures for the principal items of its balance sheet on 31 December 1919 were the following: Assets: Bills discounted, 113,779 contos; advances on current account, 123,146 contos; bills receivable, 96,550 contos; sundry guarantees, 196,721 contos; values deposited, 97,435 contos. Amongst the liabilities, the values deposited on account of third parties amounted to 304,557 contos. The amount of the deposits at sight and at term are shown in the table.

The balance sheet totals and the amount of deposits at sight and at term in relation to the share capital are noteworthy in the case of the Banco Mercantil do Rio de Janeiro, the National City Bank, the Banco Nacional Ultramarino, the Banco Hollandez and the London and River Plate Bank. The commercial bills discounted show a large increase in the case of several banks, notably in that of the Banco do Brazil, in which it rose from 16,330 contos (paper) in 1915 to 39,209 contos in 1916, to 46,165 contos in 1917, to 78,519 contos in 1918 and 113,779 contos in 1919.

The greatest progress was made by the Brazilian and English banks by the Portuguese bank and the Dutch bank.

Figures relating to the banks operating in the State of S. Paulo are contained in the following table:

TABLE XI. — *Banks operating in the State of S. Paulo.*

Banks	Share capital	Paid-up capital	Deposits at sight	Deposits at term	Balance sheet total
Banco de Credito Hypothecario e Agricola	26,984	23,812	40,716	18	156,584
Banco do Commercio e Industria	20,000	20,000	84,443 (1)	12,146	279,490
Banco Commercial de São Paulo	20,000	12,000	58,858	7,877	230,989
Banco de São Paulo.	15,000	9,000	19,092	3,139	66,426
Banque française et italienne pour l'Amerique du Sud. . .	7,500	7,500	172,787	26,021	550,268
Banque bresilienne italo-belge .	5,527	5,527	25,173	3,216	200,271
Banque française pour le Bresil .	2,000	2,000	12,351	2,930	43,768
Banco Melhoramentos de Jahu .	1,000	997	3,888	1,768	8,688
London and River Plate Bank, São Paulo	500	500	3,577	130	56,051
London and River Plate Bank, Santos	500	500	2,420	16	8,125
Banco Popular de Guaratinguetá	500	500	1,671	323	3,927
London and Brazilian Bank, São Paulo	—	—	31,761	11,584	178,685
The National City Bank, São Paulo	—	—	23,284	3,642	144,780
The British Bank of South America	—	—	10,216	5,458	61,498
Banco Nacional Ultramarino, São Paulo	—	—	12,087	2,290	55,456
Brasilianische Bank für Deutschland, São Paulo	—	—	4,355	2,475	41,234
The National City Bank, Santos .	—	—	6,323	—	30,986
Banco Nacional Ultramarino, Santos	—	—	2,756	1,889	25,961
London and Brazilian Bank, Santos	—	—	2,880	226	10,925
Brasilianische Bank für Deutschland, Santos	—	—	708	83	4,973
Total . . .	99,511	82,336	519,346	85,231	2,159,085
Foreign banks . . .	16,027	16,027	310,678	59,960	1,412,981
Brazilian banks . . .	83,484	66,309	208,668	25,271	746,104

(1) Figure relating to 1918.

The foreign banks have attained a remarkable development in the State of S. Paulo. The banks for which the capital is not stated are branches of banks having their head offices in Rio de Janeiro.

The majority of the banks show progress in 1919 in comparison with previous years. The French and Italian Bank for South America and the Italo-Belgian Brazilian Bank enjoy a solid and prosperous position in the banking system of the State of S. Paulo. The highest figures for bills discounted are found in the balance sheets of the principal Brazilian banks, the Banco do Commercio e Industria and the Banco Commercial de São Paulo. This is explained by the fact that Santos, the second port of Brazil, is the nearest port to the capital of the State of S. Paulo.

In the following table we give figures relating to the banks operating in the State of Rio Grande do Sul:

TABLE XII. — *Banks Operating in the State of Rio Grande do Sul.*

Banks	Share capital	Paid-up capital	Deposits at sight	Deposits at term	Balance sheet total
Banco Pelotense	30,000	9,000	22,669	124,532	418,181
Banco da Provincia do Rio Grande do Sul	20,000	10,000	152,361	—	450,532
Banco Commercial Franco-Brasileiro . .	16,000	6,447	3,411	—	33,650
Banco do Commercio	10,000	5,000 ⁽¹⁾	85,416	130,004	385,568
Banco Porto Alegrense	4,000	1,473	5,728	—	13,407
London and River Plate Bank . . .	500	500	715	265	4,411
The National City Bank	—	—	3,046	—	11,557
London and Brazilian Bank, Porto Alegre	—	—	1,313	6,944	26,059
Brasilianische Bank für Deutschland, Porto Alegre	—	—	137	2,751	14,469
Total . . .	80,500	32,420	274,790	264,496	1,357,834
Foreign banks . . .	500	500	269,585	9,960	56,496
Brazilian banks . . .	80,000	31,920	5,211	254,536	1,301,338

(1) Figure relating to 1918.

In the State of Rio Grande do Sul, in which agriculture and stock-farming are highly developed, the Brazilian banks have reached a high degree of prosperity, so much so as to be able to bear comparison with the best banks of Rio de Janeiro, S. Paulo and Santos. The Franco-Brazilian Commercial Bank began to operate in 1917.

We give, lastly, a table containing figures relating to the banks in the State of Minas Geraes.

TABLE XIII. — *Banks Operating in the State of Minas Geraes.*

Banks	Share capital	Paid up capital	Deposits at sight	Deposits at term	Balance sheet totals
Banco Credito Real de Minas.	17,000	15,109	9,145	15,155	96,225
Banco Hypothecario e Agricola.	17,176	12,759	(1) 5,547	28,354	103,443
Total . . .	34,176	27,868	14,692	43,509	199,668

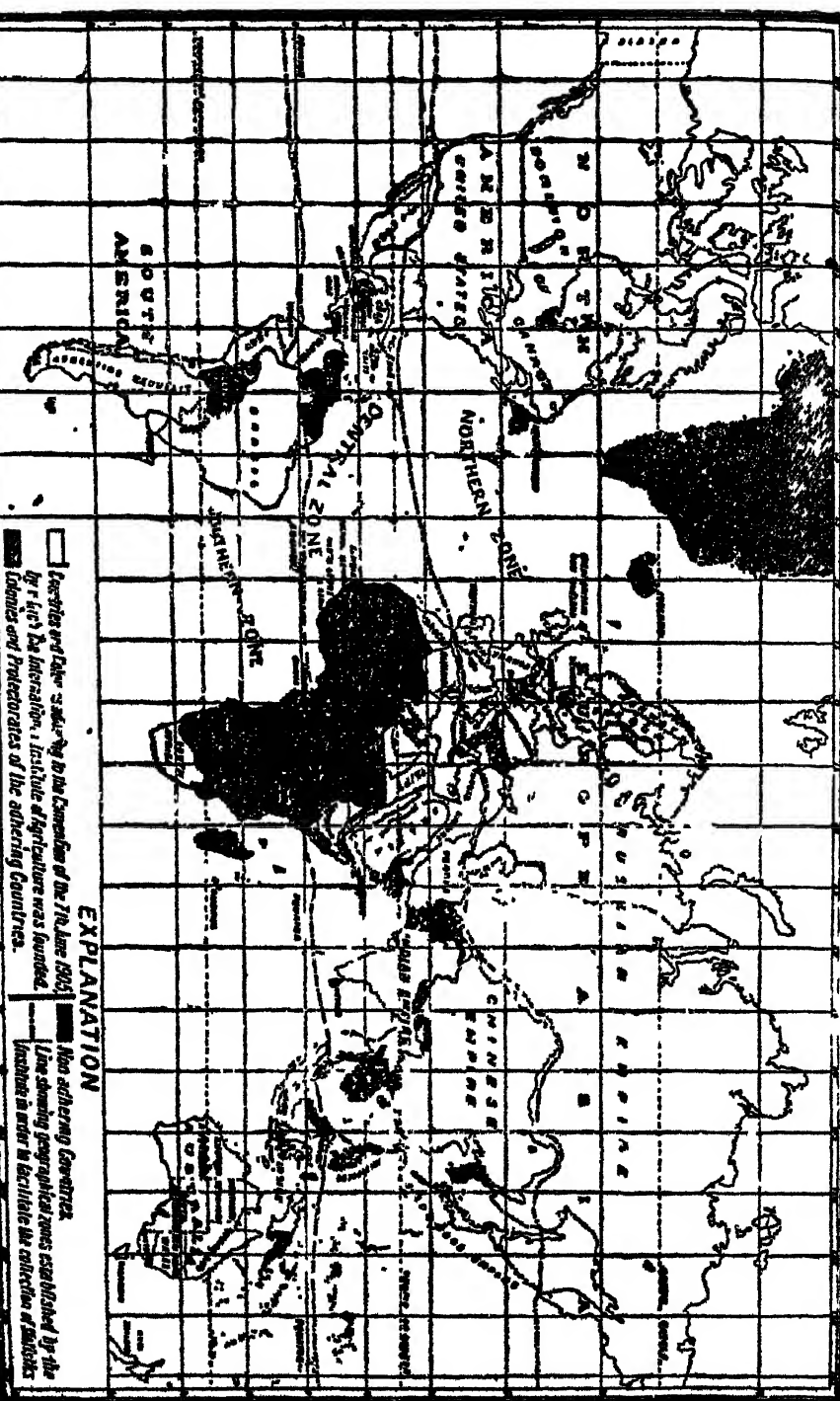
(1) Figure relating to 1917.

In the other states, too, a certain number of banks exists, in some cases of considerable importance, as in Pernambuco where the balance sheets of the banks show higher figures than are found in those of the banks of the State of Minas Geraes, in Bahia, Pará, etc., but we have here confined ourselves to indicating the banking situation in the four states which are most active from the economic point of view.

* *

In view of the facts that Brazil has not yet had a hundred years of independent existence and that it has only enjoyed freedom of commerce since 1808, it must be admitted that the economic progress which it has made, after passing through a strong movement of revival which is one of the most striking characteristics of its history, is truly remarkable. The War has doubtless contributed, by the immense demand which it occasioned on the part of the belligerent States for raw materials, foodstuffs, and even manufactured articles, to improve its position, supplying it with the means which it needed for developing its natural resources. The War had another, and even more important, effect upon Brazil; it largely contributed to instilling into the Brazilians an admirable confidence in their own strength, pointing out to them the way to true prosperity and true progress, the way, that is, of working for the economic independence of their country.

A country which is at the same time young in the vital forces which it possesses and old in the civilization of the people who inhabit it; a country with great prospects, where the land is of exuberant fertility, where are to be found all the mineral wealth which constitutes the basis of modern industry and the most abundant water-power in the world, Brazil is destined to a most brilliant economic future, to which it will the more rapidly attain the more fully it has at its disposal the labour necessary for the development of its immense resources.



☐ Countries and Colonies adhering to the Convention of the 7th June 1905.
☐ Non adhering Countries.
 by the International Institute of Agriculture was founded.
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 Lines showing geographical zones established by the
 Institute in order to facilitate the collection of statistics.

EXPLANATION

INTERNATIONAL INSTITUTE OF AGRICULTURE
BUREAU OF ECONOMIC AND SOCIAL INTELLIGENCE

INTERNATIONAL REVIEW
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THE INTERNATIONAL INSTITUTE OF AGRICULTURE

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The International Institute of Agriculture was established under the International Treaty of 7 June 1905, which was ratified by forty governments. Nineteen other governments have since adhered to the Institute.

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The Institute, always confining its attention to the international aspect of the various questions concerned, shall :

(a) collect, study and publish as promptly as possible, statistical, technical, or economic information concerning farming, vegetable and animal products, trade in agricultural produce, and the prices prevailing in the various markets ;

(b) communicate the above information as soon as possible to those interested ;

(c) indicate the wages paid for farm work ;

(d) record new diseases of plants which may appear in any part of the world, showing the regions infected, the progress of the diseases, and if possible, any effective remedies ;

(e) study questions concerning agricultural co operation, insurance and credit from every point of view ; collect and publish information which might prove of value in the various countries for the organization of agricultural co-operation, insurance and credit ;

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PRINCIPAL WEIGHTS, MEASURES AND MONEY OF THE VARIOUS COUNTRIES AND THEIR BRITISH EQUIVALENTS

1 Cadastra. arpent (Hungary)	=	1.42201	acres
1 Centimetre	=	0.393715	inches
1 Cho (60 ken) (Japan)	=	119.30327	yards
1 Crown (100 heller) (Austria-Hungary)	=	10 d.	at par
1 Crown .100 öre (Denmark, Norway, Sweden)	=	15.1 /8d.	at par
1 Deciatine (2 tchetwert, (Russia)	=	2.69966	acres
1 Dinar, gold (100 para) (Serbia)	=	933/64d.	at par
1 Dollar, gold (\$) (100 cents) (United States)	=	48.5/16d.	at par
1 Drachm, gold (100 lepta) (Greece)	=	933/64d.	at par
1 Egyptian Kantar	=	99.0498	lbs.
1 Feddan Masri (24 Kirat Kamei) (Egypt,	=	1.03805	acres
1 Florin, gold, or Gulden (100 cents) (Netherlands)	=	12.733/64d.	at par
1 Franc (100 centimes) (France)	=	933/64d.	at par
1 Gramme	=	0.03527	oz.
1 Hectare	=	2.47109	acres
1 Kilogramme	=	2.2	lbs.
1 Kilometre	=	1093.613	yards
1 Kokou (10 To) (Japan)	=	1.58726	quarts
1 Lei, gold (100 bani) (Rumania)	=	933/64d.	at par
1 Leu (100 stotinki) (Bulgaria)	=	933/64d.	at par
1 Lira (100 centesimi) (Italy)	=	933/64d.	at par
1 Litre	=	0.21998	gallons
		0.0275	busheis
1 Mark (100 Pfennige) (Germany)	=	11 3/4d.	at par
1 Mark (100 penni) (Finland)	=	933/64d.	at par
1 Metre	=	3.28084	feet
1 Milreis, gold (Brazil)	=	28. 261/64d.	at par
1 Milreis, gold (Portugal)	=	48. 519/64d.	at par
1 Peseta, gold (100 centimos) (Spain)	=	933/64d.	at par
1 Peso, gold (100 centavos) (Argentina)	=	38.1137/64d.	at par
1 Pound, Turkish, gold (100 piastre) (Ottoman Empire)	=	188.015/64d.	at par
1 Pund (Sweden)	=	0.93712	lbs.
1 Quintal	=	1.96843	cwis.
1 Rouble, gold (100 kopeks) (Russia)	=	25.1 3/8d.	at par
1 Rupee, (16 annas) (British India)	=	$\frac{1}{10}$	of £1 (gold)
1 Tahari (20 piastre) (Egypt)	=	48.111/32d.	at par
1 Verst (Russia)	=	1166.64479	yards
1 Yen, gold (2 fun or 100 sen) (Japan)	=	25.037/64d.	at par
1 Zentner (Germany)	=	110.23171	lbs.

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INTERNATIONAL REVIEW
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Part I: Co-operation and Association

BELGIUM

THE OFFICIAL AND VOLUNTARY ORGANIZATION
OF AGRICULTURE.

OFFICIAL SOURCES :

- EXPOSÉ STATISTIQUE DE LA SITUATION DES ASSOCIATIONS D'INTÉRÊT AGRICOLE PENDANT L'ANNÉE 1911. Ministère de l'Agriculture et des Travaux Publics. Administration de l'Agriculture. Brussels, 1913.
- RAPPORT RELATIF À L'EXÉCUTION DE LA LOI DU 31 MARS 1898 SUR LES UNIONS PROFESSIONNELLES PENDANT LES ANNÉES 1908-1910 présenté aux Chambres législatives par M. le Ministre de l'Industrie et du Travail. Office de l'Assurance et de la Prévoyance Sociales. Brussels, 1914.
- ANNUAIRE STATISTIQUE DE LA BELGIQUE ET DU CONGO BELGE, 44^e année : 1913. Ministère de l'Intérieur. Brussels, 1914.
- ARRÊTÉ ROYAL DU 16 AOÛT 1919 : AMÉLIORATION DES RACES BOVINES, SUBSIDES AUX PROVINCES ET AUX SOCIÉTÉS D'ÉLEVAGE. *Moniteur Belge*, No. 256. Brussels, 13 September 1919.

OTHER SOURCES :

- BRACKE (A.): Petites laiteries. In : *Journal de la Société Nationale des Agriculteurs de Belgique*, No. 23. Brussels, 5 June 1920.
- COLLARD BOVY (Aim.): La laiterie coopérative. In : *Journal de la Société Nationale des Agriculteurs de Belgique*, No. 28. Brussels, 10 July 1920.
- Do. : Les différents systèmes des laiteries coopératives. *Do.*, Nos. 31, 35, 39. Brussels, 31 July, 28 August and 25 September 1920.
- Do. : Pour rendre les laiteries prospères. *Do.*, No. 52. Brussels, 25 December 1920.
- HULOT (Ad.): Les unions professionnelles agricoles en Belgique. In : *Annales de Gembloux*, No. 4. Brussels, July-August 1919.

- KRIFERATH H. : Le contrôle de la production laitière et l'organisation des laiteries de la Co-operative de l'agglomération bruxelloise. In : *Annales de Gembloux*, No. 2 Brussels, March-April 1912.
- LECHEVIN (Octave) : Les commissions consultatives près des Ministères de l'Agriculture des divers pays de l'Europe. In : *Journal de la Société Nationale des Agriculteurs de Belgique*, No. 19 Brussels, 21 September 1919.
- NYS J. : Etude resumée du coopérativisme agricole belge. In : *La Coopération Agricole*, Nos. 2 to 11 of 1919 and Nos. 1 to 4 of 1920 Louvain (Liège).
- VERMEERSCH (A.) : Manuel social. La législation et les œuvres en Belgique. 2 vol. Louvain, 1927 : A. Cuysspruyt.
- BOERLINCQ BELGE ou LIGUE DES PAYSANS EXERCICE 1919. Rapport présenté succinctement à l'Assemblée Générale du 24 mai 1920 par le Chanoine Luytgaeren, S. Th. B., Secrétaire général. Louvain, 1920.

The movement in favour of rural organization in Belgium is of recent origin ; in fact, the first societies were not formed until shortly before 1890. In 1888 at Goor-Saint-Alphonse arose a "boeiengilde" followed by several others, and in 1889 several co-operative agricultural societies were constituted. But not until 1895 did the movement become active.

The causes which originated it differ little from those observed in other countries ; viz. the continually increasing necessity of perfecting agricultural methods, by a wider application of the principles of chemistry and of agricultural mechanics and by eliminating the middleman.

In 1884 the government began to give an impulse to the movement by the organization and diffusion of agricultural education, by propaganda, by the concession of grants to societies, and by fiscal facilities. These advantages are still conferred and in some cases have been materially increased.

Agricultural associations in Belgium are divided into two great classes : (1) associations for the protection of vocational interests, which are regulated by the law of 31 March 1898 ; (2) associations more strictly economic. These last are regulated by the consolidating law of 22 July 1913 (1) in which were embodied the provisions of the earlier laws of 1873, 1881, 1886 and 1901, and which contained new regulations for still further facilitating the development of voluntary associations.

There is, besides, in Belgium an official organization of agriculture. We shall give a short account of this before considering some forms of societies which have attained a high degree of development.

§ 1. THE OFFICIAL ORGANIZATION OF AGRICULTURE.

In Belgium the official organisation of agriculture is based on the *comices agricoles* established by the decree of 20 January 1848. Their organization was laid down by the decree of 20 October 1849, and they were further regulated by the decrees of 18 October 1889 and of 21 February

(1) On this subject, see the article on *The Legal Regime of the Commercial Societies and the Law of May 25th, 1913*, in our issue of January 1914.

1898. They must contain not less than 50 regular members and a certain number of honorary members. The first must reside within the district or possess a farm within it. They pay an annual subscription varying from 3 to 5 francs.

The *comice* watches over the agricultural interests of a given district fixed by the Ministry of Agriculture, and fosters agricultural progress particularly by means of competitions, exhibitions, and experimental farms.

In 1911, the date of the latest official statistics, there were in Belgium 167 *comices* containing 40,640 members. Their receipts amounted in all to 400,973 francs, and their expenses to 299,853 francs. In that year they organised 90 competitions, distributing 217,973 francs in prizes.

The *comices* of each province are united in a federation which bears the name of *Société provinciale d'agriculture*. This is formed of delegates from each *comice*, comprising the president or vice-president of each, and a member delegated for two years. It meets once a year to discuss questions affecting the agricultural interests of the province. The assembly of delegates nominates a committee, called the *Commission provinciale d'agriculture* to manage the ordinary business of the Society.

At the head of the official agricultural organisation stands the *Conseil supérieur d'agriculture* regulated by several decrees (29 November 1834, 30 March 1845, 3 April 1859, 15 December 1870, 18 October 1889 and 21 February 1898). It is called as a consultative body to give its opinion on all questions concerning agricultural development submitted to it by the Minister, by the provincial societies, or by its members.

It comprises 18 delegates from the provincial societies, two for each province, and 18 members nominated by the King, 9 of whom represent voluntary associations. The first two classes of delegates are elected for six years, while the 9 nominated members are appointed annually. The ordinary sessions are half-yearly, but extraordinary meetings may be called. A Central Committee composed of the president, the secretary and two delegates deals with questions which are very urgent or of a secondary character.

The Council may divide itself into sections. At its sessions the inspector-general and the directors of agriculture are present as well as any persons whom the Council may desire to interrogate, as being experts with regard to the subjects under discussion.

At the last meeting, held last January (1) the question of the eight-hours working day was discussed. The Council, observing that the carrying on of agricultural labour depends directly on atmospheric conditions, expressed an opinion contrary to this limitation as regards agriculture. The improvement of the condition of the working classes was also discussed. The meeting recognized the necessity of facilitating the acquisition of land and the building and purchase of dwellings by agricultural labourers. The

(1) See the report of the meeting of the Superior Council of Agriculture published in the *Journal de la Société Nationale des Agriculteurs de Belgique*, No. 4, Brussels, 22 January 1921.

attention of the Council was then called to the means best adapted to keep labourers in the country districts. It was considered that these means are in a certain degree identical with those recommended for the improvement of the condition of the rural classes, and must be partly sought for in perfecting the system of agricultural education and especially those services which tend to beautify rural life and so to make it more attractive. Lastly, resolutions were passed calling for the extension to agriculture of the Law of 24 December 1903 regarding accidents to workmen, for the organization of lectures and courses of instruction in agricultural mechanics, for the opening of prize competitions for breaking up and improving land, and for grants from the *Ligue du Coin de Terre* of small kitchen-gardens to those workmen and employes who are suffering most through the high cost of living. This outline of the subjects recently discussed by the Superior Council of Agriculture will serve to give an idea of the importance in Belgium of this great assembly, in which the voice of the agriculturist freely makes itself heard.

Besides the official organizations above-mentioned, constituted in every province of Belgium, there are others, more especially in certain regions. These are *polders* and *wateringues*, organized under the provisions of the Laws of 18 June 1846 and 27 April 1848, which must be considered as corporate bodies, having the character of public institutions. They direct works of embankment, irrigation and drainage; they also protect a part of the national wealth by taking steps to promote public health and to ensure the safety of communications. They are empowered to expropriate land and impose taxes. They work under the control of a permanent delegation, and sometimes even under the direct control of the central power.

West Flanders had before the war 30 *wateringues* covering an area of about 100,000 hectares. In East Flanders there were 117, between *polders* and *wateringues*, covering 41,000 hectares. Brabant and Limburg had two each, which covered a total area of some hundreds of hectares.

We now pass to those associations which owe their origin to private initiative.

§ 2. VOLUNTARY ORGANIZATION.

Official statistics divide the voluntary agricultural associations into five classes, namely;

(a) agricultural vocational unions (agricultural clubs, farm-women's clubs, beekeepers' societies, poultry societies, live stock breeding societies, etc.);

(b) societies or syndicates for the purchase of seeds, fertilizers, cattle feeds, etc.;

(c) societies or syndicates for the sale of milk, and for the manufacture and sale of butter and cheese (co-operative dairies);

(d) agricultural credit societies (*comptoirs agricoles*, Raiffeisen banks, central agricultural credit banks, Schultze-Delitsch banks);

(c) agricultural insurance societies (for insurance of live stock and agricultural produce).

We give particulars of some of these groups of societies.

1. *Agricultural Vocational Unions.*

At the close of 1913 there were in Belgium 2,357 agricultural societies and federations registered under the Law of 31 March 1898 regarding trade unions. They were thus distributed among the various provinces; West Flanders, 518; Brabant, 498; East Flanders, 473; Luxemburg, 332; Namur, 210; Antwerp, 96; Hainault, 94; Liège, 81; Limburg, 55. Let us now consider the more characteristic types of this class.

Agricultural Clubs — These institutions, otherwise called *gildes*, represent in Belgium the fundamental type of association, as syndicates do in France. Their objects are the study and the protection of agricultural interests. Their sphere of action is confined to a village, a commune, or several communes. Nearly all belong to a cantonal, provincial or national federation. The most important federation is the *Boerenbond* (Peasants' League), with head-quarters in Louvain. It has frequently been mentioned in this *Review*, and we shall shortly have occasion to describe the work accomplished by it in 1919.

The work of the agricultural clubs is especially directed to co-operation and mutual insurance: the *boerengilde* has always in connection with it a co-operative society formed among its members. Most frequently these take the form of sections for the purchase in common of agricultural requisites; these sections combine to form central societies to deal directly with the producers and large dealers; thus, for instance, the purchasing sections of the agricultural clubs affiliated to the *Boerenbond* procure their supplies from the *Comptoir central*, which is a great co-operative purchasing society. The proceeding is the same with the agricultural clubs affiliated to the other great federations.

The clubs also undertake agricultural credit and insurance, promote the formation of stock-breeding and agricultural syndicates, diffuse the principles of agricultural science by means of journals published by their federations, assist their members in legal questions and find employment for labourers.

Farm-women's Clubs. — Besides the numerous agricultural associations, formed chiefly of men, and pursuing the most varied objects, there are in Belgium the so-called farm-women's clubs (*cercles des fermières*) of which Canada set the first example.

The moving principle, which led to the foundation of such institutions, was the necessity of checking the rural exodus which had extended also to women. It seemed, in fact, that one of the most effective methods of combating rural depopulation was to appeal directly to women in the hope of making them prize the advantages of rural life, and to wain them of the danger and disillusionment of the city, as well as to supply them with technical instruction to enable them to undertake with increased capability

the duties especially assigned to them (poultry-keeping, cheese-making, gardening, etc).

The *écoles ménagères ambulantes* in active operation for several years supplied the need to a certain extent, but in order that their work should not be lost, it was necessary to unite the women of the country districts in permanent associations. Thus in 1906 arose the first *cercles de fermières*, which spreading rapidly throughout Belgium, reached in 1912 the number of 183 containing 21,461 members.

The system is very simple : during the term of an agricultural school for girls, members are recruited with the help of the pupils, from among the farm-women of the neighbourhood, and thus the nucleus of the club is formed. It is managed by a Committee composed of the president, two vice-presidents, the secretary and three other members. The member's fee is 1.50 fr. With the fund formed by these contributions, the needs of the club itself are supplied, and objects in domestic use, agricultural implements, etc., are purchased. In connection with the meetings, which are usually held four or five times a year, lectures and practical lessons are given, and competitions, agricultural shows and lotteries are held. Nearly every club possesses a small library, containing books on domestic economy, hygiene, agriculture, dairying, feeding of cattle, etc. Like other associations, these also are tending to unite in federations, of which there are already several. At their head is the *Comité National des Fédérations des Cercles de Fermières*, with its headquarters in Brussels, a committee to which much of the progress made by the farm-women's clubs is due.

Cattle-breeding Syndicates. — Among the syndicates whose object is the development and improvement of live stock, the cattle-breeding associations are most numerous. The increased number of co-operative dairies to which we shall presently refer, has made the necessity for these institutions felt even among small farmers, who through the associations have learnt to breed cattle on rational principles and by modern methods.

For the improvement of breeds two systems are adopted in Belgium. The older one bases the choice of animals for reproduction, and the granting of prizes, solely on the exterior features ; the other especially on the economic results obtained from each animal.

In accordance with the first and more widely diffused system, the society possesses one or more selected bulls and keeps a register of breeding, a *herd-book* in which the best animals with their genealogy and their value expressed in points, are entered as selected sires. Members who possess animals of superior quality receive prizes and other advantages.

According to the latest statistics, the total number of these syndicates was 537 on 31 December 1911, with 21,973 members, possessing 71,882 head of cattle entered in the societies' registers. The greater number was found in East Flanders (156), West Flanders (122) and Brabant (146).

The local syndicates, whether independent or formed in connection with another society, usually form themselves into groups by districts which correspond to the sphere of operations of the *comices agricoles* in order to keep another herd-book in which only those animals shall be entered which have

received a fixed number of points. The whole number of local syndicates in a province forms the Provincial Federation for the improvement of local breeds.

While on the subject of cattle breeding syndicates, we must not omit to mention an important decree, which with the object of intensifying the improvement of breeds of cattle, accords special grants to breeding societies. This decree, dated 16 August 1919, provides that among the federations which in every province group the syndicates formed for the increase of pure breeds, a sum of 125,000 francs shall be annually divided. Each federation may obtain a grant of 6 francs for each animal entered in the herd-books, and a total sum of not less than 6,000 francs, on condition that all the annual receipts, from whatever source they may be derived, shall be devoted to (1) training among breeders competent judges with a view to the selection of sires which ought to be preserved in the interests of breeding; (2) organizing and strictly supervising the keeping of herd-books by the syndicates; (3) awarding prizes for the good maintenance of bulls; (4) meeting expenses incurred in carrying out ministerial instructions.

For the federations of cow-testing syndicates, a sum of 25,000 francs is set aside, to be divided among the various provinces in proportion to the number of cows in each. In this case the grant made to each syndicate through the federation is one franc per annum per cow tested on condition that it is entered in the herd books, and that the owner shall pay a fee proportionate to the necessary expenses of testing, the fee being not less than one franc for each animal. To the syndicates which provide for testing cows a grant for preliminary expenses is made equal to 50 per cent of the requisites purchased.

The above-mentioned Decree also provides for the federations of the so-called *syndicats d'exploitation du bétail*. These are the syndicates which select animals, not according to outward appearance, but according to their capacity for transforming their food into useful products. The first duty of the association is the inspection of such products, whether meat, milk or butter, etc. To this purpose is devoted a sum of 50,000 francs, to be divided among the nine provinces of Belgium. The grant to the federations is fixed at 50 centimes per annum for every animal inspected and entered in the books of a *syndicat d'exploitation* belonging to a subsidized federation, on condition that the owner shall pay a fee proportionate to the cost of inspection, and not less than 50 centimes per head.

A grant of 25 francs for every affiliated syndicate will also be made to the federations for the inspection, which must be carried out by a competent expert.

Lastly, a sum of 60,000 francs to be divided among the various provinces, according to the instructions of the Technical Commission for Stock-breeding, will be spent in facilitating the purchase of selected sires by the *syndicat d'exploitation* belonging to a subsidized federation, the members of which are not individually in a position to keep the number of bulls necessary for the improvement of their own cattle. The grants will be equal

to 20 per cent. of the value of the animal, with a maximum of 300 francs for each bull.

In Belgium there are also flourishing associations for breeding horses, especially draught horses, and for the improvement of the breeds of goats and pigs, on which space does not permit us to dwell. We therefore confine ourselves to pointing out that for more than thirty years both the State and private individuals in Belgium have sought to develop to the utmost the breeding of live stock, recognizing in it one of the chief sources of the national wealth.

2. Co-operative Dairies.

Co-operative dairies have largely contributed in Belgium to the progress made in cheese-making and in the breeding of cattle. Their beneficent labours have been fully brought to light by a zealous organizer of this form of co-operation, A. Cillard Bovy, General Secretary of the *Société Nationale de la laiterie*. He declares that wherever a co-operative dairy has been established, signs of progress are at once apparent. This is true of all the provinces, but more especially of Luxemburg. In this province milk, upon the value of which a low estimate was placed, was often exchanged for other food and for articles sold by dealers at usurious prices, causing heavy loss to the producers. The co-operative dairy, by combining agriculturists in efforts for a common object, enabled them to produce goods of excellent quality, which, sent to the best markets of the country, found purchasers who paid a fair price for them in ready money. This enabled the members of the dairy to purchase manures to fertilize their land, concentrated feeds for their cattle, selected seed to produce abundant crops, and selected animals to replace those of less value. The change in the economic condition of Luxemburg was, in a word, radical. The land became extremely fertile, and was enriched with breeds of horses and cattle which were sought after in the markets of every nation.

In Belgium there are five varieties of co-operative dairy. The oldest, simplest, and most economical is represented by the *small local dairies*, in which the milk, brought in daily by the members, is worked by hand. There is no expense for the carriage of the milk, and the cost of fuel is very small. Some dairies have electric power furnished from a central office, which reduces labour making it more economical and more regular, and consequently ensuring larger returns. But notwithstanding these advantages the small co-operative dairies are attended with serious inconveniences; they are generally in undesirable places, inconvenient, ill-kept and badly situated, without water or storage, or the requisites for obtaining satisfactory results according to modern technical principles.

Next come the *regional dairies* in which the milk is worked by hand or by steam. They have sections for separating the cream, which is then taken to a central factory where it is made into butter. Regional dairies are numerous in Luxemburg where they have contributed to the diffusion into remote villages of the application of mechanical methods to the dairy industry.

With very small expense the members, often 20 or 30 or even more per section, can, with a single separator, accomplish the separation of the cream of all their farms. Previous to the war, when every section was established in a suitable place where supervision was actively exercised, and the cream was brought in at least every two days, this system produced excellent results. In general the places for the making of the butter of regional dairies are well fitted up and provided with all the appliances of modern science.

Before the war there were also *co-operative creameries* here and there for working the cream in common. Each farm was provided with a hand separator, and the cream was separated and sent to the co-operative dairy two or three times a week. But this system was not in very general use, because the butter being made from milk coming from different places and in different conditions of ripeness could not be kept long, especially in summer.

The *central steam dairies*, another type of society working in Belgium are now the least economical, because of the high cost of the carriage to great distances of whole and separated milk, and of the almost necessary pasteurisation of the separated milk, which would otherwise run the risk of being returned to the farms in bad condition.

For butter-making the central dairies are pre-eminently the model establishments, because they allow of a scientific treatment of the milk, cream, and butter, more nearly perfect than that of the dairies worked by hand and of the regional dairies, and give agriculturists surer guarantees from the hygienic point of view. Here all the produce may be subjected to pasteurization, and if the dairy be well fitted up, with abundance of water and a refrigerator of sufficient power, it will be able to perform all the work under the best conditions, and produce articles of superior quality.

Last come the *federated dairies* which are a considerable advance on the other dairies from an economic and social point of view. According to this system, every important commune or group of neighbouring communes forms a distinct and independent society, with its own rules and its own steam machinery for separation and for the pasteurization of the cream and separated milk. All the societies in the same region are federated, and have a central creamery to which every day the cream is brought from the local separating stations to be transformed into butter. But this central creamery is only for working the cream in common, that is, the federated dairies remain quite free, not bound by common rules, nor subject to a single management. Every society is composed of agriculturists who are acquainted with each other and forms an independent centre, which elects its own committee of management and adopts such regulations as may best meet local conditions and those of the members. Various local institutions, in harmony with the requirements of the members, may in each district be formed in connection with the co-operative dairy. Each local society appoints one or two delegates to form the managing committee of the federation, and to supervise its work and its accounts. The treatment of the milk by the local societies diminishes the danger of infecting a whole re-

gion in case of any outbreak of disease and this is a great advantage offered by the federated dairies over the central dairies, where every day in a common centre, persons from various points of the same zone meet, who may easily be the means of conveying infection. This form of dairy is especially adapted to regions like Flanders where there are large villages and numerous herds of cattle.

For the co-operative dairies, which are numerous in Limburg and Luxembourg, there are no recent statistics. In 1911 there were 559 in existence as compared with 69 in 1895; and the members numbered respectively 57,474 (an average of 103 per society) and 3,501. The 57,474 members possessed in all 196,338 cows, an average of 3.4 per member. In 1911, the last year for which we have official statistics, the value of the produce sold by the co-operative dairies amounted 39,793,726 fr. (as compared with 3,236,942 fr. in 1895) an average of 71.625 fr. per society, and 693 fr. per member. This amount of 39,793,726 fr. may be subdivided as follows: 39,231,801 fr. for butter sold, 280,996 fr. for milk, 33,793 fr. for cheese, and the remainder for other produce, especially separated milk.

The *Union Nationale des Laiteries Belges* has been established at Brussels to ensure the purity of produce, and to co-operate in the progress and perfecting of the dairy industry. To attain this object it has opened an office of control and technical inspection to supervise the federated dairies, and to verify the genuineness of their produce.

3. *Agricultural credit societies.*

The agricultural credit institutions in Belgium are of two kinds: *comptoirs agricoles* and Raiffeisen rural banks.

1. *Comptoirs agricoles*. — By the law of 15 April 1884 the General Savings Bank (1) is authorized to employ a part of its funds in loans to agriculturists, through the *comptoirs agricoles*. These are councils consisting of not fewer than three persons skilled in agriculture, who undertake to ascertain the credit-worthiness of borrowers and their solvency, and to supervise transactions in course and to take legal action in the case of insolvent debtors: they are jointly and severally liable and they receive from the institution granting the loan a premium (*ducroire*) in consideration of the guarantee they give. The *comptoirs* also act as intermediaries between the Bank and individual borrowers. In 1914 they were 16 in number. There are no recent statistics respecting their working.

2. *Rural Banks*. The second kind of agricultural credit institution in Belgium is the Raiffeisen rural bank. These societies are regulated by the Law of 18 May 1873 on commercial companies. The provisions of this law, together with those of the Laws of 1881, 1886, and 1901 are embodied in the Consolidating Law approved by Royal Decree of 22 July 1913. By

(1) See the article on *The "Caisse générale d'Épargne et de Retraite" during the War*, in our issue of June 1920.

virtue of the Law of 21 June 1894, the General Savings and Pensions Bank facilitates the work of the Raiffeisen banks by opening credits in their favour guaranteed by the central banks (which are limited liability companies) the most important of which is that of the *Boerenbond*. However the rural banks only avail themselves to a small extent of the funds placed at their disposal by the General Savings Bank, and work almost exclusively with their own funds and those of their respective federations.

The number of rural banks in Belgium rose from 159 in 1897 to 540 in 1907, to 952 in 1917, and to 1,039 in 1919. In 1919 they were thus divided according to provinces: Brabant, 266; Luxembourg, 163; Limburg, 129; West Flanders, 124; Antwerp, 111; Hainault, 101; East Flanders, 57; Liège, 53; Namur, 35.

The number of members of the 363 banks affiliated in 1912 to the Central Bank of the Boerenbond amounted to 27,132. The amount of the deposits in hand on 31 December of the same year was 30,135,185 fr., and that of the loans outstanding was 15,678,720 fr.

Two popular banks of the Schultze-Delitsch type, those of Goé-Limburg and Argenteau, must also be mentioned. These, lending especially to agriculturists, may be considered as agricultural banks. The official statistics of the agricultural associations in Belgium contain no statistics respecting their transactions.

§ 3. THE PRINCIPAL AGRICULTURAL FEDERATIONS. .

As in all countries where rural organization is fully and systematically developed, the societies in Belgium are as a rule grouped in federations, which in addition to the general work of propaganda and of assisting the affiliated societies have to perform other special functions of an economic character which vary according to particular cases.

The greater number of these federations have permanent offices near their headquarters, in which a paid staff carries on current business. They are centres of technical education and protection of agricultural interests. Their journals, besides keeping the public informed as to their work, have articles on practical agricultural science, and other subjects relating to the rural classes.

The following are the principal federations of this kind:

Ligue agricole luxembourgeoise.

Fédération agricole du Hainaut.

Fédération agricole de la province de Liège.

Ligue agricole de la province de Namur.

Boerenbond belge.

Landbouwersbond van Oost-Vlaanderen.

Provinciale Boerenbond van West-Vlaanderen.

Secretariat des œuvres sociales de l'arrondissement de Bruxelles, which includes a certain number of institutions connected with agricultural interests.

All these federations have distinctively religious and social aims. Their sphere of operations is the respective province, except in the case of the *Boerenbond* which operates throughout the whole country, and the *Secrétariat des œuvres sociales de Bruxelles*, which is limited to the district of Brussels.

Among these federations the *Boerenbond* (Peasants' League) of Louvain is distinguished for the multiplicity of its labours, and for the important results it has obtained. In Belgium it is the most important organ of the agricultural co-operative movement. It arose in 1890 at the beginning of the propaganda for rural organization, and collected round itself the *boerengilden*, parochial corporations in connection with which various co-operative organizations (societies for purchase and sale, rural banks, dairies, mutual insurance societies) adapted to the improvement of the conditions of agriculture and of the rural classes, had been formed. The manifesto of 1 August 1890 assigned to the *Boerenbond* a three-fold mission: (1) the protection of the religious, moral, and material interests of the peasants, (2) the improvement of agricultural legislation; (3) the corporate organization of agriculture. It may safely be asserted that the results obtained corresponded in every respect to the hopes resting upon it. During the war, even in the midst of difficulties of every kind, its work of earnest and enlightened assistance to the agricultural class and to the population of Belgium in general, never ceased. The relations with local associations were maintained, and its central departments, which it endeavoured to strengthen and extend to meet the new exigencies, were extremely active.

The *Boerenbond*, administered by a managing committee and a Superior Council, carries on its work through various sections; we shall rapidly review these, keeping in mind the report for the year 1919.

That year was characterized by intense activity in the protection of the interests of agriculturists; the League was thus continually in communication with the Food Ministry (*Département du Ravitaillement*) respecting various questions, more especially regarding the trade in cereals, potatoes, butter and milk.

The *Boerenbond* in 1919 arranged for 709 lectures on technical subjects and present day problems.

It drew up special pamphlets to give to its members practical explanations of the law on war profits, and reparation of damages caused by war. It appointed many commissions for the purpose of helping those who had suffered loss to formulate their demands for compensation. At Roulers a special department was constituted to assist the people of West Flanders.

On 31 December 679 agricultural *gildes* with 60,264 members were affiliated to the *Boerenbond*.

The *Ligue des fermières* (Farm-women's League) included at the same date 153 clubs with 14,312 members.

The *Fédération générale des horticulteurs* promoted by the *Boerenbond* to improve the gardening industry, turns its attention specially to the technical education of its members and to the co-operative sale of vegetables. Its branches at Louvain, Malines and Termonde sold goods to the value of

3,042,937 fr. The Federation also supplied seeds to its members to the value of 297,836 fr.

The Office of Purchase and Sale (*Comptoir d'achat et de vente*) procured for its members 27,631 tons of manures, cattle feeds, and other goods to the value of 5,638,936 fr.

In the Office for the Inspection of Dairies, 90 co-operative dairies were registered, of which 28 were in Brabant, 27 in Limburg, 25 in the province of Antwerp, and 10 in East Flanders. From January to December 1919 inspections were made.

Sixty-eight new rural banks were inscribed in the Central Credit Bank. The amount of the deposits at sight or at term remained almost equal to that of the preceding year: 214,994,125 fr. as compared with 212,464,881 fr. in 1918. The Central Bank opened credits for 872,000 fr. in favour of 19 local banks which were without funds to distribute to their members. It also granted 133 mortgages to the amount of 1,407,650 fr. Up to 15 May 1920 more than 31 millions of francs for 3,203 advances on compensation for war damages had been distributed, chiefly in West Flanders.

The General Department of Inspection promotes new organisations, re-organizes those which have suffered most severely from the war and deals with all important questions of interest to the rural population.

The Mutual Fire Insurance numbered on 31 December 1919, 18,382 policies representing a capital of 289,035,944 fr. The losses amounted to 91,036 francs.

The position of insurance against accidents was as follows: the *Caisse Commune d'Assurance des Cultivateurs Belges* numbered 8,435 policies; the total amount of premiums was 568,335 fr.; in all compensation was paid for 1,478 losses. The *Assurance Agricole* had 25,024 policies; its premiums amounted to 602,109 fr. and for 2,737 losses compensation was paid.

The *Boerenbond* did wonderful work in aid of the devastated regions of West Flanders. By means of the advances made by the Central Credit Bank, the *Société Belge de Défrichements*, which owed its origin to the *Boerenbond*, was enabled to undertake in Flanders important works in systematizing the land and restoring it to fertility. On 1 April 1920 it was employing in these works 3,000 men, 1,400 hectares of land having been already levelled and brought under cultivation.

For the sake of brevity we omit other movements in which the *Boerenbond* has taken the initiative. It has once more shown that it possesses exact knowledge of the greatest needs of agriculture, and of the rural population of Belgium, and that it is their most faithful and authoritative interpreter. It has passed through the terrible crisis of the war without losing any portion of its old vitality, so that it may look forward with full confidence to the future.

MISCELLANEOUS INFORMATION RELATING TO CO-OPERATION AND ASSOCIATION.

CZECHOSLOVAKIA

THE CO-OPERATIVE AGRICULTURAL MOVEMENT IN CZECHOSLOVAKIA. — *Bulletin du Ministère de l'Agriculture de la République Tchécoslovaque*. Prague, 1 January 1921.

The origin of the co-operative agricultural movement in Czechoslovakia dates to the middle of the 19th century when Dr. Kampelik started his campaign in favour of rural organization, by the creation of parish associations and agricultural credit banks.

The Czech agricultural co-operative movement embraces 3,800 societies having a capital of 700,000,000 crowns and 450,000 members. The Raiffeisen banks form the largest group and the Central Federation of the Czech Agricultural Co-operative Societies of Bohemia, formed in 1896 and numbering 135,000 members is its most important organization.

The (Catholic) Federation of Co-operative Societies and Agricultural Associations of Bohemia does not contain more than one tenth of the number of members contained by the Central Federation. In Moravia there are two federations, founded respectively in 1898 and 1899: one of these is a federation of co-operative societies and of saving banks, while the other is a federation of the Raiffeisen Banks of Moravia and of Silesia. The Federation of the Savings Banks and Raiffeisen Societies of Silesia was formed in 1901; it includes also the societies for purchase and sale and the distributive societies. The German co-operative movement is represented by the Central Union at Prague, Brno and Opava. Lastly the socialist parties have formed some federations of agricultural co-operative societies for the benefit of the small farmers. We may add that in Bohemia the district savings banks also supply agricultural credit.

According to official statistics there were, in January 1918, 8,185 co-operative societies in Bohemia, Moravia and Silesia, including 1,331 savings banks of the Schultze-Delitsch type, 911 distributive societies, 699 productive societies, 354 building societies and 4,870 agricultural co-operative societies. These latter, which thus represent 60 per cent. of the total number, include 3,803 Raiffeisen banks and 1,073 societies of other kinds. The development of the Raiffeisen banks is shown by the following figures.

TABLE I. — *Development of the Raiffeisen Banks.*

Year	Number of banks	Number of members	Capital	Reserve funds	Deposits
			crown ^s	crown ^s	crown ^s
1901.	787	68,400	634,000	211,000	22,835,000
1912.	2,516	250,564	2,708,000	3,459,000	209,959,000
1918.	2,598	264,788	2,946,000	7,288,000	553,263,000

As to the federations of Czech co-operative societies, their development is shown in following table :

TABLE II. — *Development of the Federations of Czech Co-operative Societies.*

Year	Raiffeisen bank	Other co-operative societies	Payments	Total business done
			CROWN	CROWN
1903	1,084	812	10,652,000	110,681,000
1911	2,404	1,156	51,603,000	612,172,000
1918	2,576	1,244	411,379,000	3,312,516,000

Apart from the organization of co-operative credit, the Czech farmers have formed, with varying success, co-operative societies for purchase, for sale and for production.

The most prosperous societies are the societies for purchase and sale, the societies for the dessication of chicory, the co-operative distilleries and (particularly in Moravia) the co-operative dairies. The market gardeners and fruit-growers' co-operative societies are steadily developed. The threshing societies and the societies for the cultivation of land have not been very successful. The societies for the supply of electricity and the co-operative milling societies, on the other hand, are developing successfully. The two great electrical establishments at Dráze (Bohemia) and Háje (Moravia) which supply electricity to the surrounding districts, may be specially mentioned. The societies for the supply of electricity of the district of K. Hradec are combined in a federation to provide electricity for 22 districts. The farmers take considerable part in these enterprises.

The co-operative societies for purchase, for sale and for production were thus classified in 1918.

TABLE III. — *Co-operative Societies for Purchase, for Sale and for Production in 1918.*

Dairy societies	166
Market-gardeners, fruit-growers' and vine-growers' societies	18
Distilleries	61
Societies for the dessication of chicory	32
Societies for the dessication of potatoes.	12
Societies for purchase and sale.	167
Societies for the cultivation of flax	25
Stock-farming societies (co-operative grazing societies)	68
Carried forward	549

Brought forward . . .	549
Threshing societies	136
Societies for the supply of electricity	80
Distributive societies	82
Building societies	35
Miscellaneous societies	42
Total . . .	924

These 924 societies contained 109,764 members; their capital amounted to 20,300,000 crowns and their reserve funds to 12,400,000 crowns.

The different classes of societies are grouped in special sections in the Federation. Thus there is a section for the co-operative societies for purchase and sale; a section for societies for the dessication of chicory, with a co-operative factory, in which two thirds of the chicory produced by the members is handled; a section for co-operative distilleries.

In Subcarpathian Russia the Federation of Co-operative Societies of Uzhorod, founded on 25 April 1920, embraces 301 co-operative societies, including 163 credit banks, 92 distributive societies, 29 agricultural societies, 12 basket-making societies, 2 societies for the sale of wood, 1 society for the sale of wool, 1 distillery and 1 vine-growers' society.

On 1 January 1920 the co-operative societies of Czechoslovakia were divided according to the nature of the liability of the members, as shown in Table IV.

TABLE IV. — *Statistics of Co-operative Societies on 1 January 1920, showing Liability of Members.*

	Number of societies	Including	
		Societies with limited liability	Societies with unlimited liability
Bohemia	5,609	3,025	2,784
Moravia	2,750	1,724	1,027
Silesia	679	338	341
Slovakia	1,235	1,235	—
Subcarpathian Russia . . .	180	180	—
Total . . .	10,653	6,502	4,151

These 10,653 societies may be classified as follows :

TABLE V. — *Different Classes of Co-operative Societies on 1 January 1920.*

	Raiffeisen banks	Savings banks		Distributive societies	Agricultural societies	Industrial societies	Building societies	Other co-operative societies	Federations
		With unlimited liability	With limited liability						
Bohemia	2,598	614	181	661	669	671	387	26	13
Moravia	898	4.3	112	405	475	317	126	-	8
Silesia	326	63	14	122	69	47	30	1	1
Slovakia	—	405	—	749	58	—	—	23	1
Subcarpathian Russia	—	95	—	54	18	13	—	—	1
Total	3,822	1,590	307	1,991	1,286	1,048	549	57	27

GERMANY.

THE TWENTY FIFTH ANNIVERSARY OF THE "PREUSSISCHE CENTRAL-GENOSSENSCHAFTS-KASSE" — *Deutsche landwirtschaftliche Genossenschaftspresse* No. 20. Berlin, 30 October 1920

On 1 October 1920 the *Preussische Central-Genossenschafts-Kasse* completed its twenty-fifth year of existence. The efforts to create a central bank for agricultural co-operative societies date as far back as 1860. At the beginning of 1867, almost 30 years before the foundation of the *Preussische Central-Genossenschafts-Kasse*, a bill was proposed in the Prussian Upper House of which the object was thus stated: "With a view to financing co-operative societies, the royal Government of the State will institute a central bank, granting it a working fund of two million thalers." Many objections were brought forward against this proposal and it was rejected by the Government. About 1880 the Government was again requested to establish agricultural credit institutions, but not until 1895 were these efforts crowned with success. In October of that year the *Preussische Central-Genossenschafts-Kasse* came into existence.

Immediately after its foundation the new Institution was joined by 11 central co-operative banks, with 786 co-operative societies, supplying credit, in round numbers, to 60,000 persons. At the present time the central banks and co-operative societies which have business relations with the *Preussische Central-Genossenschafts-Kasse* contain more than 1,931,000 members corresponding — if we consider an average family to consist of 5 persons, — to more than 8½ millions. The business of the Bank has risen from 141,626,000 marks in its first year to 101,681,671,000 marks in its twenty-

fifth. The total business done during its twenty-fifth year is, in round numbers, 533,800 millions of marks.

In the history of agricultural co-operation, the institution of the *Preussische Central-Genossenschafts-Kasse* marked a new era, which was at once characterized by a remarkable increase in the number of agricultural co-operative societies. Through the concession of credit by the Institution an increase of rural banks took place in the provinces which were poorest in capital, viz. East and West Prussia, Brandenburg, Pomerania, Posen and Silesia. Their numbers, during the period 1895-1900, rose from 653 to 2,172, an increase of 233 per cent., while in other parts of Germany at the same time the increase was from 4,257 to 7,621, only about 80 per cent. For co-operative societies, especially those only beginning, it is an important fact that the *Preussische Central-Genossenschafts-Kasse* gave decided preference to unlimited liability, as the true basis of credit, thus taking a line which permitted it to grant credit, not only as economically as possible and for long periods, as required by agriculture, but also if needful, to grant credit which might seem large but was really perfectly safe. Thus the *Preussische Central-Genossenschafts-Kasse* has from its beginning asserted that it had arisen not to take the place of co-operative action, but only to make it possible, and to encourage its efforts and its full development. And in the course of business it has always considered it the bounden duty of co-operative societies to take care that they have an adequate capital of their own, this being the only way to render possible the financial independence of the individual co-operative organizations.

To promote the greatest financial independence, the *Preussische Central-Genossenschafts-Kasse* at an early period introduced bills of exchange and cheques into the business relations of co-operative societies with their central banks, and of co-operative societies and central banks with itself, thus extending as widely as possible the system of payments without cash among the agricultural co-operative societies.

2. REGULATIONS FOR CARRYING OUT THE LAW OF 5 MAY 1920 ON THE FORMATION OF CO-OPERATIVE SOCIETIES FOR RECLAIMING LAND. — FELTZER (Öffentlicher Geheimer Ober-Regierungsrat): Die Boden-Verbesserungs-genossenschaften. *Ministerialblatt der Preussischen Verwaltung für Landwirtschaft, Domänen und Forsten*, No. 11. Berlin, November 1920.

The origin of the Law of 5 May 1920 on the formation of co-operative societies for reclaiming land, to which we made a brief reference in our issue of October 1920 (page 680) may be traced back to the early days of the World War. Shortly after the opening of hostilities the necessity was manifested for the improvement of uncultivated land in order to increase the production of food and forage, and to give useful employment to prisoners of war. Consequently on 7 November 1914, an order was published to permit the formation of co-operative consortia amongst the owners of marshy or barren lands (even without their own consent) in order to transform such lands according to an organized plan into fields,

meadows and pastures, and to put them to economic use. The order, which was issued as a war regulation, remained in force for nearly a year, and was withdrawn on 30 December 1915. In its short period of existence, 345 co-operative societies were formed *et novo* in accordance with its provisions with 133,700 hectares, and 72 water consortia with an area of 72,473 hectares, formed under the Law of 7 April 1913 regarding the regulation of land drainage, were changed into co-operative societies for reclaiming land. About 40,000 hectares of the whole area were made fertile and devoted to the provisioning of the country. This area would have been further extended if the increasing scarcity of chemical fertilizers had not continually hindered cultivation.

The good results of this order made it desirable, especially after the close of the war, that its regulations should be made permanent. This was done, as we have seen, on 5 May 1920. On 23 October 1920 the Ministry of Agriculture issued regulations for carrying out the law. Co-operative societies for reclaiming land were generally speaking to be formed in all cases, even without the consent of the parties interested. Nevertheless, as the regulations themselves point out (Part. 3), the formation of a co-operative society would be undesirable when strongly opposed by the parties interested, because in the present difficult position of the State finances such an undertaking ought to be as a rule conducted without government aid, depending only on funds supplied by the persons interested.

But in the case of opposition based on ignorance, dislike of co-operative methods, or similar objections, the undertaking should be conducted even against the will of the majority of the persons interested, because the working and utilization of the soil is, according to the text of the constitution of the German State, the duty of landowners towards the community, and the necessities of the times imperatively demand that the earth should be made to yield the largest possible returns. As to the finances required for carrying out the plans of land reclamation it is probable that the mortgage banks will supply funds for the larger Co-operative undertakings by issuing communal bonds (Part. II, § 3). For the more extensive co-operative consortia the right of directly issuing bonds is contemplated.

It is also probable that the State will constitute a special bank, in which the Empire and the State will participate, the chief object of which will be to procure credit for co-operative land reclamation. At present the funds created for providing productive work for the unemployed may be largely utilized, sometimes to the extent of half the cost of the undertaking. Until these projects are realised, the commissioners appointed to form co-operative societies are instructed to apply through the proper authorities to the Ministry of Agriculture, Land and Forests, if they are not in a position to provide the necessary funds themselves.

When work carried on by a co-operative society causes permanent damage to a member, he may ask to have it stopped, and request the repayment of the contributions paid between the sending in of his request and the winding up of the society.

3. THE NUMBER OF AGRICULTURAL CO-OPERATIVE SOCIETIES ON 1 JANUARY 1921. — *Deutsche landwirtschaftliche Genossenschaftspresse*, No. 1, Berlin, 15 January 1921.

According to an article in the *Deutsche Reichsanzeiger*, 439 co-operative societies were formed in December 1920, of which 243 were agricultural co-operative societies. These included :

- 56 rural banks ;
- 32 societies for purchase and sale ;
- 9 dairy societies ;
- 146 miscellaneous societies.

The system of limited liability was adopted by 14 rural banks, by 29 societies for purchase and sale, by 8 dairy societies, and 133 miscellaneous societies, whilst the remaining societies adopted unlimited liability.

In the same month there were 43 co-operative agricultural societies dissolved, including :

- 9 rural banks ;
- 2 societies for purchase and sale ;
- 6 dairy societies ;
- 26 miscellaneous societies.

The net increase was thus 200 societies.

According to the statistics of the National Federation of German Agricultural Co-operative Societies, there were on 1 January 1921 :

- 87 central co-operative societies ;
- 18,559 rural banks ;
- 3,883 societies for purchase and sale ;
- 3,315 dairy societies ;
- 6,575 miscellaneous societies ;

making a total of 32,419 agricultural co-operative societies.

SWITZERLAND.

THE SWISS UNION OF RAIFFEISEN CREDIT BANKS IN 1919. — XVIII^{ème} RAPPORT ANNUEL DE L'UNION SUISSE DES CAISSES DE CRÉDIT RAIFFEISEN. Lausanne, 1920.

With the exception of 1910, when 31 new credit societies were founded, the year 1919 shows, for the Swiss Union of Raiffeisen Credit Banks, the largest number of new additions, viz. 28 societies. On 31 December 1919, the Union embraced 250 societies, with 28,976 individual members. While a certain number of small banks and regional savings-banks were compelled to suspend payment because of the difficulties connected with their foreign business, the 250 credit societies affiliated to the Union have amply met their engagements. We may add that because of the continual increase of concentration of capital effected by the large banks, the agriculturists feel more strongly the necessity of association, so that

the co-operative idea cannot fail to profit from the present situation.

The following table contains aggregate statistics of the credit societies affiliated to the Union in 1918 and 1919.

TABLE I. — *Aggregate Statistics of the Affiliated Credit Societies in 1918 and 1919.*

	1918	1919
Number of credit societies	224	250
Number of members	16,784	16,476
Balance-sheet total fr.	65,864,025.32	85,354,323.65
Capital "	1,057,264.97	1,250,947.94
Savings deposits "	30,237,432.57	38,643,068.96
Number of depositors	46,247	55,265
Bonds and deposits for fixed periods. . fr	16,718,000.85	21,742,887.77
Deposits on current account	16,448,964.55	21,953,797.15
Amount of loans	41,197,866.27	54,428,843.11
Number of borrowers	14,521	15,517
Overdrafts on current account. . . . fr	22,322,421.59	28,411,744.45
Profits "	197,675.11	285,158.62
Losses "	1,777.80	1,157.94
Reserves "	1,125,665.11	1,418,322.10

This table calls for some remarks. In the first place the increase of the balance sheet total is 20,000,000 francs, or 30 per cent. It is equal to that of the preceding year, but it may be expected that the progress made in war time will slacken a little in future. The balance sheet total of the individual societies fluctuates between 2,733,995.15 fr. (Waldkirch, St. Gall) and 13,643.70 fr. (Embd, Valais) with an average of 341,400 fr. per society, as compared with 294,000 fr. in 1918.

The capital, which has not the same importance in the case of societies in which the liability of the members is unlimited as in the case of societies with limited liability, amounted to 1,250,947.94 fr. or 18 per cent. more than in the previous year. Among the liabilities, the savings deposits take the first place. The net increase exceeds 8,400,000 fr., or 28 per cent. They amounted to 45 per cent. of the balance-sheet total. The average amount per depositor was 699 fr. as compared with 653 fr. in 1918. The number of depositors had increased by 14.5 per cent., and exceeded 55,000. The deposits for a fixed period and bonds, in spite of attractive offers of investments at a higher rate, have increased by 5 millions, or 30 per cent., showing that capital prefers a safe investment to high interest.

The same remark is applicable to deposits on current account, which have increased by 5 millions and a half on the previous year. The rate of interest paid on current accounts is from $3\frac{1}{2}$ to 4 per cent., on savings deposits $4\frac{1}{4}$ to $4\frac{3}{4}$ per cent., on bonds $4\frac{1}{2}$ to 5 per cent.

The loans comprise loans on notes of hand, bills of exchange, mortgage bonds, and purchases of public securities. These last have increased by 13,300,000 fr. or 32 per cent. The average per loan is 3,514 fr.

The overdrafts on current accounts, of which the average rose from 6,100 fr. to 681 fr. are increasingly resorted to by commune and corporations, because of the rates given by local credit societies. The rates of interest on loans vary from $4\frac{3}{4}$ to $5\frac{1}{2}$ per cent. In the case of current accounts, $\frac{1}{4}$ or $\frac{1}{2}$ per cent on the amount of business done is generally added yearly or sometimes half-yearly.

The deficits are not, properly speaking, the result of losses but of the expenses of forming new banks, which cannot be covered during their first year, because at the present time they amount to a very large sum (entering in the commercial register, books, forms, office fittings).

Besides the local credit societies, there is a central bank which acts as a clearing-house. Its development, which may be followed in Table II, shows for the last year a considerable increase in business, which rose from 147 to 198 millions. The balance-sheet total also shows a certain increase, although the amount of the deposits of local credit societies has remained the same as in the preceding year, these societies having many opportunities of utilizing their available funds among their members, or of finding excellent investments.

In spite of the extension of business, the net profit for the year was only 38,654.61 fr. This is easily explained. The central bank is obliged always to have in the banks with which it has relations large sums on current account withdrawable at sight, at lower rates than those given to its creditors. This circumstance, and the continual increase in general expenses, and above all the considerable sums which had to be written off on account of the fall in the value of securities, could not but have an effect on the results of the year's transactions. The paid up share capital shows an increase of 66,500 fr. and amounts to 579,000 fr. The uncalled share capital was 380,000 fr. so that the total share capital on 31 December 1919, amounted to 959,000 fr. The amendment of the rules made in the course of the year 1920, by which the credit societies will be made liable for the engagements of the Union, up to twice the amount of the shares held by them, will increase by so much the capital, and will bring it up to 1,918,000 fr.

With regard to the financial relations between the local banks and the central bank it is stated that cheques are not so extensively used as was hoped. While in the western part of Switzerland, this practical and advantageous mode of payment is customary, in the eastern part, with the exception of St Gall, it is scarcely ever used.

TABLE II. — *Development of the Central Bank
of the Swiss Union of Raiffeisen Banks 1902-1919.*

Years	Total business done	Balance-sheet total	Share capital	Reserve
	fr. fr.	fr. fr.	fr. fr.	fr. fr.
1903	1,636,241	240,516	2,400	221
1904	2,474,425	492,473	5,500	974
1905	3,834,262	608,788	17,100	1,297
1906	4,135,959	577,851	31,550	592
1907	5,377,458	897,757	45,450	927
1908	6,331,216	1,097,714	60,700	2,011
1909	8,723,883	1,179,212	75,550	3,622
1910	11,579,994	1,474,219	90,800	7,051
1911	16,862,442	1,891,363	109,800	10,039
1912	18,821,034	1,754,854	134,600	10,140
1913	9,663,443	1,556,175	248,000	14,704
1914	10,856,730	1,828,163	310,100	20,000
1915	20,316,566	3,045,886	342,400	24,500
1916	37,115,465	5,262,923	374,500	30,000
1917	82,528,267	8,118,179	383,000	37,000
1918	147,453,607	12,812,316	512,500	49,000
1919	198,429,966	13,046,506	579,000	60,000

TUNIS.

1. ESTABLISHMENT OF NATIVE CHAMBERS OF AGRICULTURE AND COMMERCE.

— *L'Afrique française*. Paris, January, 1921.

Forten years the government of the Protectorate, anxious at the same time to assure the raising of the condition of the Mohammedan population and to intensify the production of Tunis, has endeavoured to modernize the native methods of cultivation. The importance of the effort may be judged when it is remembered that $\frac{11}{12}$ ths of the agricultural produce of the Regency is produced by the natives. In 1913 the Resident General instituted Native Economic Services, whose principal duty was to transform the agricultural methods of the fellah. A further step was made by the establishment of Native Chambers of Agricultural and Commercial Interests.

The government, deeming that the rural populations of the North of the Regency and the inhabitants of Tunis were suitable for the making of a first experiment, have recently established, under the provisions of a Decree of March 1920, a Native Chamber of Agricultural Interests for the North, and a Native Chamber of Industrial and Commercial Interests for Tunis.

While respecting the principle established in 1907 for the Consulta-

tive Conference, that native questions should be considered by assemblies composed solely of Tunisians deliberating among themselves in their own language, protected from irritating discussions, and thus gradually receiving their civic education in the presence of a French functionary who is their guide and counsellor rather than their president, and at the same time preserving for these consultative bodies the character of groups representing trade and district interests, the government felt that the time had come for introducing the principle of election.

For the Chamber of Agriculture, the chief agriculturists of each *cheikhat* meet and appoint a delegate for the *cheikhat*. These delegates in their turn nominate from among themselves four representatives for the *caïdat*. From this list the Resident General chooses one name for the *caïdat*. For the Chamber of Commerce, composed both of Jews and Mahomedans, the choice of the government is made from two lists of candidates, of which one, representing industry, is drawn up by the masters belonging to the various corporations, while the other, representing trade, is drawn up by merchants who pay more than a certain sum as a tax on their business.

The delegates are elected for six years, half their number retiring every three years. The Chambers are recognized as public institutions, may receive grants and donations, and draw up an annual budget. The Director of Native Economic Services is their president. The elections which have recently taken place were orderly and without incident.

These Chambers, containing the most notable and competent individuals of their profession, will inform the government of the needs of the people, and will, in turn, be consulted by the government with regard to certain administrative proposals.

This is another instance of the policy of constant co-operation between the French administration and the natives, which is the very essence of the Protectorate. While supported thus by past experience the new Chambers are a great innovation, since they are the first elected native assemblies. If the attempt should be successful it will be extended to the South of the Regency whose economic interests though less closely organized than those of the North, are not less important.

**2. NATIVE THRIFT SOCIETIES IN 1919 (1). — COMPTE RENDU DES SOCIÉTÉS INDIGÈNES
ET PRÉVOYANCE EN 1919. Tunis, 1820.**

After deduction of advances repaid, the receipts increasing the assets of the native thrift societies amounted in 1919 to 905,025.93 francs, or 73,638.72 francs more than in 1918, the year in which the increase of realized assets was greatest since 1911. This increase has affected all the sources of income, except the debts of the old societies, and the additional

(1) For the work of these Societies in 1918 see our issue of January 1920, page 17.

centimes of medjba tax, suppressed since 1913, as well as the additional centimes of the djerba land-tax, the amount of which varies little. The increase cannot be attributed to the state of the harvest of 1919, which was only of average amount; it is in reality owing to the considerable improvement in the economic condition of the native agriculturists through the steady rise in the price of their produce since 1918. It may be said without exaggeration that the present period is more favourable to them than to the rest of the population, the more so because from the special nature of their requirements, they are little affected by the corresponding increase in the cost of manufactured products.

Owing to this general prosperity the Societies distributed in 1919 only 11,752 quintals of corn, 12,779.20 quintals of barley, 44.10 quintals of oats, 45 quintals of beans and 5 quintals of chick-peas; they have granted no loans for subsistence, and only one mortgage loan for 10,000 francs. But on the one hand, they keep their capital in reserve, in case of a bad harvest, to meet the needs of their members who are unfortunately too much inclined to thriftlessness, and on the other they are turning their efforts to new fields of action. Thus their attention is more especially drawn to co-operative societies for production, the formation and working of which they facilitate by advancing capital (such advances amounting in 1919 to 160,505.27 fr. as compared with 97,618.69 fr. in 1918) and to the creation of new forms of insurance adapted to the special stage of development which the natives have reached.

The special originality of the mechanism of the hail insurance introduced by the Decree of 31 March 1919 was explained last year. The native cultivators derived immediate benefit from it, the more so because hail storms were particularly frequent in 1919. The special fund formed for this purpose from the additional centimes of ahour tax was thus entirely absorbed in the first year: 196,127.48 fr. were divided among 1,650 cultivators whose crops had been damaged. It is hoped that in the future a smaller amount of damage may permit of a wider distribution of compensation, which is now limited to cereal crops, and to returns not exceeding 6 hectolitres per hectare, and of extending the insurance to few risks, especially that of mortality amongst live stock. This fund may be increased by additional centimes on the tax on live stock imposed by the Decree of 21 December 1918, of which no statement could be made until the close of the financial year 1920. The new resources to be supplied by these centimes, valued at a minimum of 100,000 fr. per annum, are not assigned by the decree to any special object; it would be permissible to use them not only to compensate stock-owners for losses through disease, but also for the construction of sheds for common use through which, especially in winter, losses amongst live stock might be considerably reduced.

3 MUTUAL, AGRICULTURAL, CREDIT IN 1919. — STATISTIQUE GÉNÉRALE DE LA TUNISIE, Année 1919. Tunis, 1920.

The year 1919 was marked by the same stagnation as the preceding year. The number both of French and of native credit societies remained stationary and though the native credit societies kept all their members, the French credit societies again showed a slight diminution. As to the number and value of bills discounted they were very trifling.

The two following tables indicate respectively the number and membership of the credit societies and the number and value of the bills discounted in each year between 1913 and 1919

TABLE I. — *French and Native Credit Societies.*

	French credit societies		Native credit societies	
	Number	Membership	Number	Membership
1913.	24	556	27	
1914.	24	565	41	1,483
1915.	24	548	40	1,470
1916.	24	536	40	1,464
1917.	24	517	38	1,429
1918.	24	514	38	1,429
1919.	24	508	38	1,429

TABLE II. — *Bills Discounted.*

Year	Number of bills discounted	Amount francs
1913.	4,131	5,141,876.90
1914.	4,119	4,728,235.29
1915.	968	1,427,997.65
1916.	81	186,916.35
1917.	256	328,950.00
1918.	107	270,840.50
1919.	12	23,320.30

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4. THE CENTRAL FARMERS' CO-OPERATIVE SOCIETY IN 1919. — STATISTIQUE GÉNÉRALE DE LA TUNISIE, Année 1919. Tunis, 1920.

On the other hand, the Central Co-operative Society continues its work with little diminution. The amount of goods delivered to the members, although smaller than in the previous year, exceeds that of any other year, while the loans granted exceeded by more than 100,000 francs those granted in 1918. We may note that the nature of these loans is very interesting, for the increase took place particularly in the loans for the purchase of fertilizers, which rose from 6,931 francs to 272,240.40 francs.

The capital of the society now consists of 1,245 shares of 50 francs each, making a total of 62,250 francs.

Business done by the Central Farmers' Co-operative Society.

Years	Commercial operations	Loans granted from 1914 to 1919						
	Amount of goods delivered	Loans for the purchase of seed	Loans for the payment of labour	Loans for carrying out spring work	Loans for harvesting	Loans for the purchase of fertilizers	Total amount of loans	Loans outstanding
	francs	francs	francs	francs	francs	francs	francs	francs
1913	793,294.05	—	—	—	—	—	—	—
1914	408,012.85	880,558.10	332,794.45	—	—	—	1,213,382.55	—
1915	472,348.65	81,451.45	166,035.85	112,275.00	275,512.60	—	635,274.90	27,740.45
1916	1,020,837.30	1,024,508.60	408,430.75	106,217.40	202,434.70	—	1,741,591.45	16,287.75
1917	847,599.15	968,488.60	177,001.30	128,207.00	350,454.00	109,291.55	1,733,442.45	3,175.05
1918	1,889,092.17	653,870.35	82,826.00	116,050.00	441,438.20	6,931.00	1,301,115.55	29,917.35
1919	1,492,456.11	625,854.55	82,310.00	93,734.35	329,770.00	272,240.40	1,403,909.30	74,335.55
<i>Tot.</i>	6,923,640.18	4,234,731.65	1,249,398.35	556,483.75	1,599,609.50	388,462.95	8,028,716.20	151,456.15

Part II: Insurance and Thrift

MISCELLANEOUS INFORMATION RELATING TO INSURANCE AND THRIFT.

CZECHOSLOVAKIA.

LIVE STOCK INSURANCE IN BOHEMIA — *Bulletin du Ministère de l'Agriculture de la République tchéco-slovaque.* Prague, 1 October 1920.

Live stock insurance in Bohemia is carried on by private undertakings; in Moravia there is a National Insurance Institute. We here deal only with the work in 1919 of the Czech Federation of Insurance and Re-insurance of Animals used in Agriculture.

The figures referring to this federation are as follow :

Number of societies	182	
Number of members	7,152	
Number of animals insured	25,470	
Values insured	28,055,270	crowns
Number of losses	227	
Rate of mortality	0.89 %	
Compensation paid	336,058	crowns
Produce of sale of carcasses	212,953	crowns

Besides the compensation indicated, local insurance societies have obtained from the Federation 23,809 crowns for veterinary expenses, and 24,943 crowns for various other expenses. From the beginning of its operations in 1910 the Federation has paid 5,377,683 crowns. If we deduct the produce of the sale of carcasses, which amounted to 3,006,857 crowns, there remain 2,870,826 crowns as net amount of compensation paid.

The figures for the insurance of horses are as follow :

Number of societies	18	
Number of members	640	
Number of animals insured	1,531	
Values insured	3,984,350	crowns
Number of losses	33	
Compensation paid	59,820	crowns
Produce of sale of carcasses	27,465	crowns
Net amount of compensation	32,355	crowns

Since its tormation in 1914, the Federation has paid a net amount of 159,439 crowns, after deducting the value of the carcasses.

A law on live stock insurance is now being prepared. The premiums paid would be 1 per cent if the value assured does not exceed 2,000 crowns; 1.50 per cent should the insured value be between 2,000 and 4,000 crowns; 2 per cent should it be between 4,000 and 6,000 crowns.

We may add that in Moravia the National Insurance Institute insures horses, oxen and cows up to the value of 5,000 crowns, and bulls up to 8,000 crowns.

FRANCE.

CONDITIONS FOR THE SUCCESS OF LIVE STOCK INSURANCE — *L'Argus*. Paris, 31 October 1920.

R. A. Briard, manager of the *Mutuelle Percheronne*, dealing with the conditions for the success of live stock insurance from the point of view of large mutual societies, lays it down that, in order to succeed, a society for insurance against mortality amongst live stock must:

(1) Limit its action to a determined district, in which the risk being practically the same, it may draw up an appropriate tariff. With regard to this, it is interesting to note that in cattle breeding districts where the animals live part of the year in the fields, the risk of mortality is least, but immediately on entering plains or urban areas, where the animals, working harder, are therefore fed more plentifully, and where there are substitutes for fodder, such as oil-cake, molasses mixtures, etc., it is seen that the mortality is doubled.

(2) Adopt almost necessarily the mutual form, for a regional society will never make enough profit to pay adequate dividends on capital and provide for reserves.

(3) Never exceed 30 per cent for general expenses. This also necessitates a limited field of action, with a large number of insured persons.

HOLLAND.

MUTUAL LIVE STOCK INSURANCE SOCIETIES IN 1919. — SAARCIJFERS VOOR HET KONINKRIJK DER NEDERLANDEN (*Statistical Year Book of the Kingdom of Holland*). Year 1919 The Hague, 1921.

The following tables contain statistics of the mutual live stock insurance societies

1. Horses.

	1919	1916	1911	1906
Number of societies	562	538	523	377
Number of members	67,591	57,516	48,549	30,447
Animals insured	131,147	104,494	90,602	56,814
Number of losses	4,027	2,676	2,750	1,692
Amount of compensation, after deduction of the value of the carcass (in florins)	1,759,085	717,249	546,138	290,799

2. *Cattle.*

	1916		1906	
Number of societies	919	882	885	748
Number of members	93,024	90,319	89,748	72,797
Animals insured.	379,082	403,059	377,540	273,099
Number of losses	8,287	8,519	10,750	5,294
Amount of compensation, after deducting the value of the carcasses	?	?		

3. *Pigs.*

	1919	1916	1911	1906
Number of societies	122	114	107	56
Number of members	10,267	12,273	10,353	4,357
Animals insured	12,661	31,886	25,575	9,096
Number of losses	618	2,195	1,562	543
Amount of compensation, after deducting the value of the carcasses (in florins)	18,502	55,199	20,767	13,205

4. *Sheep and Goats.*

	1919	1916	1911	1906
Numbe. of societies.	133	139	137	55
Number of members	8,514	9,746	8,785	3,857
Animals insured	13,824	15,938	14,300	6,362
Number of losses	1,247	1,274	1,059	
Amount of compensation, after deducting the value of the carcasses (in florins)	22,671	16,998	11,541	5,614

To have a complete idea of the working of the Dutch mutual live stock insurance societies, it would be necessary to know also the value of the animals insured and, above all, the amount of the premiums paid. On the other hand, we are warned that the figures given only relate to the societies which have furnished particulars, and it would be indispensable to have some information regarding the number of the other societies and

the business done by them. Subject to these reservations, it may be remarked that while the insurance of cattle and, even more markedly, the insurance of horses, show a steady development, the insurance of pigs, sheep and goats shows a decided set-back. In particular, the number of pigs insured in 1919 is 60 per cent. less than the number insured in 1918, although the number of societies doing this class of insurance business reaches a higher figure than it has ever done before. This fact is due solely to the considerable reduction of the number of pigs in Holland. Whereas, in fact, in 1918 there were 1,185,438 pigs in Holland there were only 600,133 in the following year and 449,829 in 1919. The diminution in the total number of pigs and in the number insured thus correspond.

SPAIN.

THE PROVIDENT LAND CLUBS. — ASAMBLEA DE LOS COTOS SOCIALES DE PREVISIÓN. *Boletín de la Asociación de los Agricultores de España*, July-September and October 1920, and *Boletín de Agricultura técnica y económica*, September 1920. — COTOS SOCIALES DE PREVISIÓN. *Boletín del Instituto de Reformas sociales*, August and September 1920. — COMISIÓN ORGANIZADORA DE LA ASAMBLEA DE COTOS SOCIALES DE PREVISIÓN. *El Previsor*, September 1920 — AZNAR (Severino). Lo que es el coto social de previsión. *Boletín de Agricultura técnica y económica*, October 1920

The ancient trade corporations, which were so flourishing in the Middle Ages, had certain principles of mutual aid in which one may recognize the original source of the modern systems of collective aid for individual advantage.

These principles they practised in many cases. The commonest practice was the payment of a small money contribution for the formation of a mutual aid fund, but not infrequently the contribution took the form of a certain amount of labour, of which the resulting produce served to aid those members of the corporation who on account of old age or for other reasons could not provide for their own needs by their own efforts.

A typical example of the application in modern times of this last form of mutual insurance we find, as we have pointed out in other issues in the Provident Land Clubs (*Cotos sociales de Previsión*) which have recently sprung up. We do not here repeat in detail the organization and working of these clubs, referring the reader to our issues of January 1920 (page 35) and May 1920 (page 342) in which they were described, but we here note that the Spanish Government, recognizing the great social importance of the *Cotos*, has granted them special fiscal privileges.

A Royal Order of 8 November 1920 has, in fact, laid down that, in order to encourage the development and the spread of such beneficent institutions the shares of the provident land clubs shall enjoy all the special exemptions enumerated in the Royal Order of 4 October 1919.

In the meantime the *Instituto Nacional de Previsión*, with the collaboration of the public authorities and of the agricultural syndicates, arranged to hold in Graus, towards the end of last October a Congress of Provident

Land Clubs with the object of promoting the organization of such clubs in every part of the Peninsula.

The conclusions at which the congress arrived were the following :

1. It is necessary to attain to a new organization of rural property.
2. The beginning of the new system should be the compulsory formation of provident land clubs.

3. Each land club should have a certain area of land to be cultivated in common by the labourers for whose benefit the produce is intended.

4. Such land may, however, be divided into allotments each of which shall be assigned to a member of the club, who may cultivate it and utilize the produce for his own benefit, provided he pays a contribution towards the formation of a pension fund for invalidity and old age.

5. When the available land is unsuitable for cultivation on either system, a club may be formed for the purpose of grazing stock. Each member would have the right to graze a certain number of head of stock on the land, or the land could be let for grazing to non-members or both methods could be adopted simultaneously, provided always that the necessary money to pay the insurance contributions was thereby obtained.

6. When owing to difficulties arising from the nature of the land or the character of the men, it is not possible to establish a land club on suitable land, provision may be made for invalidity and old age insurance premiums by a direct levy, of such amount as may be necessary, on all the rural property in the district.

7. Lands for the establishment of provident land clubs should be taken from State property, where it exists, or be obtained by donations, when they are made, or by purchase, if the means to purchase are forthcoming, or, in default of other methods, by expropriation for reasons of public utility; the purchase price should be supplied by the Government who for this purpose should levy a contribution on the owners of rural property.

8. The management of the land clubs should be entrusted to a committee of patrons, composed of representatives of the public authorities, of the communal administration, of the owners of rural property and of the workers.

It remains to be seen whether the Spanish Government will promulgate laws based on the resolutions passed by the Conference of Graus. In the meantime, we think it worth while to give a summary of the rules of the provident land club established by the Count of Montornés in the agricultural colony of La Valleja de Mandor.

The Provident Land Club of Valleja is a mutual society which has for object the collective cultivation of lands granted for this purpose by the Count of Montornés in order to provide, by a means of the resulting produce for the needs of the members in case of invalidity or old age or for the needs of their orphans.

The returns from the cultivation will be distributed in the following manner :

Thirty per cent. to the Mutual Aid Society, 60 per cent. to the fund for

providing pensions in case of invalidity or old age or for orphans ; 10 per cent. to the fund for the protection of old age.

All the heads of families belonging to the colony and all persons over 75 years of age residing in the colony will have the right to become members.

The funds of the society will be formed principally by the produce of the land but also by donations, whether from private persons or from the State, and by the voluntary contributions of the members.

The pension fund will be managed by the *Instituto Nacional de Previsión* and the age-limit for receiving a pension will be 65 years.

The cultivation of the land belonging to the club will be carried out by the members either personally or by means of substitutes whom they will themselves pay ; the turns of the members and the days' work which each must furnish, will be fixed by the manager, who will be chosen by election.

The club will be administered by a committee of management composed of a president, a vice-president, a treasurer and a secretary, all of whom will remain in office for four years. The duties of this committee will consist in the direction of the cultivation of the land, the keeping of the books, the distribution of the profits and in making the insurance contracts with the *Instituto Nacional de Previsión*.

TUNIS.

1. MUTUAL, AGRICULTURAL FIRE INSURANCE IN 1919. — STATISTIQUE GÉNÉRALE DE LA TUNISIE, Année 1919 Tunis, 1920.

The year 1919 has seen an increase in the prosperity of the mutual agricultural fire insurance societies. Although the number of members has diminished by 14, falling from 754 to 740, the amount of the values assured increased by more than 900,000 francs, reaching the sum of 41,777,790 francs, which is higher than in any previous year. The expenses were smaller than in the previous year, and left a profit of 138,867.40 francs. The business done from 1913 to 1914 is shown in the following table :

Mutual Agricultural Fire Insurance Societies, 1913 to 1919.

Years	Number of mem- bers	Value assured	Contribu- tions paid	Sub- sidies	Miscel- laneous receipts	Total receipts	Number of loans	Compen- sation paid	Other expenses	Total payments
		fr.	fr.	fr.	fr.	fr.		fr.	fr.	fr.
1913	364	7,416,737	55,421.68	4,487.40	8,661.51	68,570.59	9	18,020.60	4,899.37	22,928.97
1914	384	7,875,699	52,883.29	6,000—	9,262.05	68,145.34	6	26,003.66	6,044.85	32,048.51
1915	509	16,324,743	121,960.15	5,000—	20,132.46	147,092.61	6	41,331.32	9,047.06	50,378.38
1916	563	14,817,284	83,212.93	5,000—	19,665.03	107,877.96	17	35,953.10	7,268.91	43,223.01
1917	652	23,231,069	119,150.67	5,000—	4,368.37	128,519.04	16	62,837.53	7,519.07	70,356.60
1918	754	40,871,907	211,679.36	5,000—	7,840.83	224,326.19	20	125,591.49	13,917.96	139,493.35
1919	740	41,777,790	212,299.59	5,050—	13,759.59	231,059.25	24	72,339.81	19,852.04	92,191.85

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* *

2. MUTUAL, AGRICULTURAL, INSURANCE AGAINST HAIL, IN 1919. — STATISTIQUE GÉNÉRALE DE LA TUNISIE, Année 1919. Tunis, 1920.

The mutual societies for insurance against hail have been not less successful. The total values assured are, it is true, less by a million francs than in the preceding year, but this is not a serious matter, as the number of persons insured has not diminished, but has slightly increased. The profits during the year amounted to 105,441.42 francs. The business done from 1913 to 1919 is shown in the following table :

Mutual Hail Insurance Societies 1913 to 1919.

Years	Number of mem- bers	Value assured	Contri- bution paid	Sub- sidies	Miscel- laneous receipts	Total receipts	Number of losses	Compen- sation paid	Other expenses	Total expend- iture
		fr.	fr.	fr.	fr.	fr.		fr.	fr.	fr.
1913	124	3,236,370	26,634.84	7,000	90.03	33,724.87	14	4,7601.16	11,181.96	58,783.12
1914	134	3,253,261	27,762.22	14,000	132.23	41,894.45	4	27,005.98	7,646.85	34,652.83
1915	234	10,538,211	79,289.57	15,000	75.39	94,364.96	69	324,706.48	36,230.31	360,936.79
1916	215	6,187,325	51,210.73	14,000	1,095.64	66,306.37	9	13,335.53	6,512.03	19,847.56
1917	243	8,672,916	71,471.35	14,000	1,724.42	87,195.77	5	7,551.98	7,097.20	14,649.18
1918	327	21,167,932	182,474.46	14,000	2,128.31	198,602.77	42	250,512.02	28,153.58	278,665.60
1919	331	20,199,860	170,946.25	14,000	2,276.52	188,222.77	17	57,158.89	25,622.46	82,781.35

Part III: Credit

MISCELLANEOUS INFORMATION RELATING TO CREDIT.

EGYPT.

1. THE LAND BANK OF EGYPT IN 1920. — *La Revue Économique et Financière*. Paris, 19 February 1921.

As is well known, the prices of cotton attained an unprecedented level in 1920. Although the landowners of moderate means who form the bulk of the clients of the Land Bank did not benefit to the full extent by the high prices, they were nevertheless favoured by selling prices hitherto unknown to them, which enabled them to cultivate completely and to enlarge their estates.

The mortgage business increased, a considerable of persons desirous of acquiring land having applied to the Land Bank for the means of financing their purchases. The new loans granted were 254 in number and amounted to £E. 887,016. The total sum invested in mortgages reached £E. 3,834,878 as compared with £E. 3,521,468 in 1919.

The total amount of annual charges to be recovered, which was £E. 269,631 before the war, has now been reduced to £E. 160,931, of which £E. 55,860 relate to previous years and £E. 105,279 to 1920. These figures are by no means excessive if one considers that in the latter part of 1920 there was a severe crisis.

The land acquired by foreclosure was disposed of as in the past. The land offered for sale readily found purchasers, so that the item "Property acquired by foreclosure" fell from £E. 3,314,814 on 30 September 1919 to £E. 1,688,822 on 30 September 1920.

* * *

2. THE "CRÉDIT FONCIER ÉGYPTIEN" IN 1920. — *La Revue Économique et Financière* Paris, 5 March 1921.

During the business year ended 31 October 1920, the *Crédit Foncier Egyptien* granted 360 loans for a total of 66,804,912 francs as compared with only 151 loans for a total of 17,221,889 francs in 1918-19. The instalments of repayment, the repayments in advance and the repayments duly made during the year together exceeded the amount of the loans, but were slightly less than in the previous year; they amounted to 78,038,469 francs

as compared with 80,356,820 francs in 1918-19, so that the net diminution in the loans outstanding was only 11,233,557 francs as compared with 63,134,932 francs. At the end of the year, the loans outstanding amounted to 472,495,766 francs as compared with 483,729,234 francs at the end of the previous year.

HOLLAND.

MORTGAGE CREDIT IN 1919. — JAARCIJFERS VOOR HET KONINKRIJK DER NEDERLANDEN
(*Statistical Year Book of the Kingdom of Holland*), Year 1919. The Hague, 1921.

During the year 1919 there was a substantial increase in mortgage indebtedness in Holland, as the following table indicates.

TABLE I. — *Amount (in thousands of florins) of New Mortgages, classified according to the Nature of the Debt.*

	1919	1918	1917	1916	1915	1914	1910 to 1913
Taken by mortgage banks on rural property.	12,059	11,576	9,786	8,914	5,527	6,894	8,376
Taken by mortgage banks on buildings	125,345	105,786	103,451	78,506	39,402	38,467	48,015
Mortgages representing loans.	62,466	40,482	25,406	17,175	10,908	16,866	19,767
Taken by other banks and institutions on rural property	211,612	153,992	90,721	68,735	37,954	51,291	44,060
Taken by other banks and institutions on buildings	65,421	57,518	43,692	40,293	23,655	34,722	35,301
Taken by individuals on rural property	164,212	111,914	92,217	68,833	41,613	64,095	71,428
Taken by individuals on buildings	29,347	22,882	15,729	15,627	9,913	10,900	8,618
Mortgages resulting from purchases not completely paid for and inequalities in the division of inheritances	363	347	371	140	255	231	260
Mortgages representing annuities for life or perpetual annuities	4,786	4,614	3,649	3,747	4,642	4,015	3,727
Mortgages representing conditional or eventual debts	14	26	49	129	9	57	17
Taken by mortgage banks on rural property	47	210	630	1,028	467	420	390
Taken by mortgage banks on buildings	2,590	2,249	2,148	1,784	750	1,294	1,380
Mortgages of which the origin has not been ascertained	8,716	5,639	8,508	6,825	2,807	7,056	2,730
Taken by other banks or institutions on buildings	12,524	12,580	8,813	7,250	4,946	5,994	5,197
Taken by other banks or institutions on rural property	34,624	26,549	21,309	16,082	8,516	14,191	12,577
Taken by individuals on buildings	519	815	1,047	94	526	296	209
Miscellaneous mortgages	737,645	557,180	427,825	335,162	192,891	256,770	262,053
Total							

The following table shows the mortgages classified according to the amount of the debt for which they form the security :

TABLE II. — *Classification of Mortgages Registered in 1919 according to the Amount of the Debt.*

			Number	Amount
				florins
Debt of	1 to	200 florins . . .	152	20,234
"	200 to	300 " . . .	434	97,228
"	300 to	1,000 " . . .	6 733	4,120,619
"	1,000 to	5,000 " . . .	37,759	91,497,651
"	5,000 to	10,000 " . . .	15,994	105,087,669
"	10,000 to	20,000 " . . .	10,732	139,085,932
"	20,000 to	30,000 " . . .	3,384	77,387,867
"	30,000 to	50,000 " . . .	2,276	82,300,954
"	50,000 to	100,000 " . . .	1,231	78,478,717
"	100,000 florins and over		743	159,568,565
Total . . .			79,438	737,645,436

Classified according to the rate of interest, the mortgages registered in 1919 are as follow :

TABLE III. — *Classification of the Mortgages registered in 1919 according to the Rate of Interest.*

	Number	Amount
		florins
Without interest.	878	6,131,967
Less than 3 %	51	208,604
From 3 to 3 1/2 %	119	617,676
" 3 1/2 to 4 %	203	1,864,978
" 4 to 4 1/2 %	5,428	32,376,408
" 4 1/2 to 5 %	16,170	113,701,268
" 5 to 5 1/2 %	38,110	285,552,106
" 5 1/2 to 6 %	4,636	66,905,616
" 6 to 7 %	3,560	34,091,743
" 7 % upwards	230	2,622,365
Rate not ascertained	10,053	193,572,705
Total . . .	79,438	737,645,436

The mortgages outstanding on 31 December 1909 and 31 December 1919 were thus classified :

TABLE IV. — *Mortgages Outstanding on 31 December 1909 and 31 December 1919.*

Rate of interest	On 31 December 1909			On 31 December 1919		
	Number	Amount in thousands of florins	Amount as % of total	Number	Amount in thousands of florins	Amount as % of total
Without interest. . .	4,401	27,633	1.34	3,535	28,413	0.93
Less than 3 %. . .	354	1,917	0.09	335	1,878	0.06
From 3 to 3½ %. . .	2,202	12,285	0.60	1,856	11,910	0.39
» 3½ to 4 %. . .	8,526	64,846	3.15	4,524	24,367	0.80
» 4 to 4½ %. . .	166,615	903,917	43.92	111,694	519,422	17.07
» 4½ to 5 %. . .	125,117	500,014	24.30	160,112	973,533	32.00
» 5 to 5½ %. . .	92,320	187,309	9.10	147,176	709,418	23.32
» 5½ to 6 %. . .	1,270	13,145	0.64	8,735	100,739	3.31
» 6 to 7 %. . .	3,677	23,496	1.14	8,518	73,402	2.41
7 % upwards . . .	195	1,500	0.07	534	6,101	0.20
Rate not ascertained .	25,903	321,971	15.65	39,947	593,576	19.51
Total . . .	430,580	2,058,033	100.00	486,966	3,042,760	100.00

The amount of the mortgage loans granted by the 52 mortgage banks carrying on business in Holland, reached 588,642,000 florins at the end of 1919. To these figures must be added 1,806,000 florins lent by two colonial mortgage banks. The following table shows the loans granted up to the end of 1914 and of 1919 by the more important mortgage banks.

TABLE V. — *Loans Granted up to the end of 1914 and of 1919 by the Principal Mortgage Banks.*

Name of bank	1914 (in thousands of florins)	1919 (in thousands of florins)
Algemeene Friesche Hypotheekbank	5,547	10,106
Algemeene Hypotheekbank	16,080	17,575
Amsterdamsche Hypotheekbank	20,035	19,837
Arnhemsche Hypotheekbank	10,075	10,544
Bataafsche Hypotheekbank	9,842	10,618
Dordrechtsche Hypotheekbank	6,525	13,175
Eerste Nederl. Hypotheekbank	14,006	15,114
Friesch-Groningsche Hypotheekbank	27,042	36,305
's-Gravenhaagsche Hypotheekbank	18,788	19,476
Haarlemsche Hypotheekbank	17,002	21,545
Hollandsche Hypotheekbank	17,340	20,120
Hypotheekb. v. Ned. (Alg. Waarb.-Mij.)	15,839	18,269
Maastrichtsche Hypotheekbank	10,153	11,828
Mij. voor Hypothecair Crediet	12,500	18,190
Nationale Hypotheekbank	46,255	43,602
Nederl. Hypotheekbank	28,999	38,811
Rotterdamsche Hypotheekbank	48,666	42,590
Utrechtsche Hypotheekbank	25,996	31,029
Veendammer Hypotheekbank	4,327	12,775
Westlandsche Hypotheekbank	27,827	31,669
Zuider Hypotheekbank	7,802	10,034
Zuid-Hollandsche Hypotheekbank	20,963	20,472

SWITZERLAND.

MORTGAGE CREDIT IN 1919. — DAS SCHWEIZERISCHE BANKWESEN IN JAHE 1919. Bearbeitet im Statistischen Bureau der Schweizerischen Nationalbank (Berichterstatler: Hermann Schunebel) Separatabdruck aus der *Zeitschrift für schweizerische Statistik und Volkswirtschaft*, 56 Jahrgang, Heft 3, Bern, Stampfli et Cie., 1921.

We have dealt in a previous issue (1) with the development of mortgage credit in Switzerland up to the end of 1918. We are now in a position to indicate its development up to the end of 1919, making use for the purpose of the statistics furnished by the *Zeitschrift für schweizerische Statistik und Volkswirtschaft*.

In Switzerland mortgage credit is furnished by the following groups of Banks: Cantonal banks (*Kantonalbanken*); large banks (*Grossbanken*);

(1) Issue of April 1920.

local banks (*Lokal- and Mittelbanken*); savings and loan banks (*Spar- und Leihkassen*); mortgage banks (*Hypothekenbanken*); savings banks (*Sparkassen*); trustee banks (*Trustbanken*); foreign banks (*Überseebanken*).

Amongst these groups the *Trustbanken* have completely abandoned the business of mortgage credit since 1914. The last group (*Überseebanken*) has done this class of business since 1914, but to a very small extent, and to a less extent each year, so that from about 56,000,000 francs in 1914, the amount of the mortgage loans granted diminished to 46,500,000 francs in 1918 and to 41,825,000 francs in 1919.

In all the other groups of banks the amount of the mortgage credit granted is steadily increasing, except in the case of the savings and loan banks, which show a considerable diminution in this branch of their activity for the amount has diminished from 232,549,000 francs in 1911 to 172,465,000 francs in 1919.

The cantonal banks and the mortgage banks much exceed all the other banking groups in mortgage credit business. The mortgage loans granted by the first group have already exceeded 1,500 millions, being 1,622,217,000 francs in 1919 as compared with 1,558,481,000 francs in 1918. Those of the second group have almost reached 1,500 millions, being 1,427,778,000 francs in 1919 as compared with 1,449,541,000 francs in 1918.

Both the cantonal banks and the mortgage banks serve almost exclusively for mortgage credit.

Mortgage credit forms an important part of the business of the local banks, of the large banks and of the savings banks.

The mortgage loans granted in 1919 in these three groups of banks were as follows:

	1919 fr.	1918 fr.
Local banks.	263,962,000	245,614,000
Large banks.	204,656,000	225,989,000
Savings banks	691,157,000	603,718,000

The total amount of mortgage loans granted by all the Swiss banks in 1919 was 4,424,060,000 francs as compared with 4,323,937,000 francs in 1918. There was this in 1919 an increase of 100 million francs over the figures of 1918. In previous years, the increases over the preceding years were as follows: 1913: 145 millions; 1914: 105 millions; 1915: 49 millions; 1916: 54 millions; 1917: 156 millions; 1918: 97 millions.

Part IV : Miscellaneous Questions relating to Agricultural Economy

I. — ECONOMIC AND SOCIAL CONDITIONS OF THE AGRICULTURAL CLASSES

FRANCE.

THE SLEEPING ACCOMMODATION OF AGRICULTURAL LABOURERS.

SOURCE :

DUFOURMANTELLE (Maurice) : De la réforme du logement rural, in *La Main-d'œuvre agricole*, Paris, December 1920 and January 1921.

Though the praiseworthy efforts made during the last twenty years by some large proprietors have in certain districts led to appreciable improvements in the housing conditions of labourers, these isolated examples have been two seldom followed, and it may be said that in France there has been no general systematic action for the improvement of rural dwellings.

There are several reasons for this indifference. On the one hand many employers do not realise the importance of the question and do not perceive that it affects in the highest degree the prosperity of their farms. Even now, though during and since the war the farmers have made large profits, it does not seem that there has been any general improvement in the housing conditions of their employés.

On the other hand, the great mass of rural labourers, still more ignorant on the subject, are surprisingly careless concerning sanitation and comfort. To earn good wages, to be well fed, to have reduced hours of labour, are the predominant desires. All the rest is of secondary importance to them.

This indifference on both sides is often so strengthened by the force of habit or respect for local traditions that it scarcely occurs to any one that things should be other than they are.

But the question of workmen's dwellings is as urgent in the country as in the city. Crowded streets have no monopoly of tuberculosis, nor of infant mortality, nor of alcoholism. These three scourges decimate or enfeeble to an equal extent the population of the country, who, in spite of their open air life and a higher moral tone, do not escape them more than

the toilers in the city. Now if we are right in blaming the want of education of the peasant population on the subject of personal or social sanitation, we may also blame their dwellings, both those handed down from father to son and those which shelter the permanent or temporary workers — where too many generations have followed one another and where the decay of years has accumulated to the detriment of the health of today.

§ 1. IMPORTANCE OF THE QUESTION OF THE HOUSING OF AGRICULTURAL LABOURERS.

The inquiry to which we shall presently refer will show, from the material as well as from the social point of view, the urgency of the question of the housing of agricultural labourers. But we must first indicate its importance for the future of French agriculture, even from the point of view of its economic development.

Even before the war there were just complaints of the exodus of farm labourers to the factory and the city, and of the consequent scarcity of labour in the country. This state of affairs is now aggravated by the war, not only because the loss of life affected more especially the peasant population, but also because the high factory wages attract and draw into urban centres a large number of agricultural labourers. If these are to be retained in the villages, it is absolutely necessary to procure for them advantages at home which may counterbalance the attractions of the towns. The question is certainly a complex one, but it would seem that better housing is one of the elements essential to its solution.

It does not seem unreasonable to suppose that when field workers (day-labourers, farm servants and small cultivators) find more comfort, ease, and home pleasures in their own abodes, a heavy blow will have been struck at the spirit of adventure which urges them to desert the land.

This is not all. Even supposing that the efforts to improve rural dwellings should prove powerless to arrest the exodus towards the towns, they must nevertheless be made, if only to facilitate the engagement of foreign agricultural labour to compensate for the deficiency of native labour.

During the war several foreign governments (Italy, Portugal, Spain) encouraged the immigration into France of their surplus labour. But they only permitted it on condition that the labourers should not only receive wages equal to those of French labourers, but also good food and suitable lodging. Foreign private associations for the protection of the interests of their fellow citizens in foreign countries often supervised from these various points of view the labour contracts made by French employers.

These tendencies have survived the war. Among the different governments there is a legitimate desire to prevent their citizens when abroad from being exploited in any way, and among the emigrants a very marked desire not to be treated like pariahs. In fact after the signature of the Franco-Polish Treaty of 3 September 1919 regulating immigration and emigration, the Franco-Italian Treaty of 30 September 1919 and the Franco-Czechoslovak Treaty of the 20 March 1920, model hiring contracts

were drawn up by mutual consent of the governments interested, in which the following clauses occur :

" Only families and households have a right to require a separate lodging. This lodging must be sanitary.

" Male and female unmarried workers shall be lodged in rooms separated according to sex. Carters, and labourers in charge of oxen and cows shall, unless it can be otherwise arranged, be lodged in the stables and cow-houses, where the employer must provide for each a bed with mattress, pillow, sheets and blankets.

" The lighting and warmth shall be the same for them as for French labourers."

The question of housing being thus connected with the engagement of foreign labour, we shall see that wherever we turn and whatever point of view we take, the problem of the housing of agricultural labourers forces itself on the attention.

The study of this problem has been undertaken by the French Society for Cheap Dwellings, which desires especially to place it on a substantial basis. With the concurrence of the Society of French Agriculturists, the Central Union of the Syndicates of Agriculturists, the Society of Social Economy and the Musée Sociale, it has opened an inquiry into the subject.

Unfortunately the war has presented this preliminary work from being as widely extended as was hoped. Such as it is, however, the inquiry has sufficiently enlightened us as to the actual condition of the housing of agricultural labourers in France.

Sixteen regions, differing from one another in customs, geographical position, economic conditions, and systems of cultivation have been separately examined. Now the recorded statements present everywhere characteristics so similar that we may safely conclude that things are not very different where there has been no inquiry.

§ 2. THE SLEEPING ACCOMMODATION OF FARM WORKERS.

The question of sleeping accommodation on which we now dwell more particularly must be distinguished from that of housing.

It is a narrower question than that of rural housing in general and concerns only the place where the hours devoted to sleep or rest are passed, and the conditions under which they may be enjoyed.

We must also add that the question, thus reduced, only concerns paid labourers living on the farm and does not concern those who are living in their own homes.

To make the report clearer, M. Maurice Dufourmantelle, Vice-president of the French Society for Cheap Dwellings has divided the farm-workers into four classes, according to the approximate similarity of the conditions of the labourers from the point of view which we are now considering. In the first group are the workers engaged by the year, in the second, women farm servants, in the third, labourers, carters, cowmen and shepherds ; in the fourth day-labourers and seasonal labourers. For each of these

classes, both the sleeping place and the actual bedding have to be considered.

(a) *Workers engaged by the year.* — It seems that workers engaged by the year should be classed among the better lodged of agricultural workers, at least as far as the sleeping-places are concerned.

From the inquiry we learn that though in certain parts of Normandy, Touraine, Nord and Burgundy, workers engaged by the year sleep in cow-houses or stables, it is different in many other districts, Brittany, Île de France, Yonne, Poitou, Maine, Limousin, Périgord, Franche-Comté, Cantal and Aveyron for instance, where they sleep apart from the cattle, sometimes in dormitories, sometimes in separate rooms, sometimes also in the room that serves as kitchen, or in an attic.

These statements are, however, only relatively true. We need not seek in them for any geographical classification, which is rendered impossible by the differences not only between one district and another, but often between one locality and another in the same district. We may, however, venture to say that as a general rule the districts in which the housing conditions of the agricultural labourers are most favourable are those of small or medium farms, where between masters and servants the old traditions of family life still exist. The Breton farm, with its living room on the ground floor, along the walls of which are ranged the recesses with beds for masters and servants, is perhaps the most characteristic expression of this idea of domestic lodging.

If now we pass from the question of the sleeping-room to that of the bedding, we shall find a condition of things which leaves much to be desired.

Almost everywhere beds for servants are rudimentary. They usually consist of wooden frames or simply of boards, with a mattress of straw or wool, or a sack of oats. An iron bedstead with hair mattress is an exception.

The employer generally supplies two blankets and two sheets, but they are not always changed frequently. On an average they are changed every month or every two months. It is true that on some farms they are changed every fortnight. But how much more numerous are those where a change is only made every two or three months.

How can it be expected that the bed can be kept sufficiently clean under these conditions, especially if it serves for two persons, or is placed in the cow-house or stable, often without a partition between it and the cattle?

As for the comfort of the farm servants, especially of those lodged in rooms, there is hardly any thought of it. Not only are the sleeping rooms often small and ill-ventilated, but they are fitted up in the most primitive way. In the replies to questions only four or five examples were found of farmers, conscious of their social duties, whose workers' rooms are provided with the elementary comfort of a table, a chair, and a stove, besides the bed. Everywhere else the furniture consists only of a chest and a few nails in the wall on which to hang clothes.

Poor as is the accommodation supplied to farm servants, do they keep their beds and rooms in a state of order and cleanliness? This question has nearly always received a negative answer. Where the care of their

rooms is left to the occupants, they take but little trouble about it. They only make their beds "once a week, or whenever it occurs to them." They have rarely any sense of cleanliness or sanitation.

Often after long and hard days of toil, overpowered by fatigue, they throw themselves on their beds without undressing as soon as the evening meal is over. The room is in no better condition than the bed. When a certain amount of order was found by the inquiry to exist, it was nearly always where the work was done by the farmer's wife or her servant.

(b) *Women farm servants.* — There is little to be said about this class of farm workers, because most of the statements made about workers engaged by the year are applicable also to women farm servants, especially as regards bedding, changing of linen, and furnishing of the bedroom.

These women seem on the whole to be treated better than the men with regard to the question under consideration. For one thing, they are nearly always lodged in the house of their employer, in the room that serves as a kitchen, or in that of their mistress or her daughters, or in a separate room, rarely in an out-building. Even in this last case they have a private room, often indeed only a small attic, a dark loft, or an ill-ventilated closet.

They generally have, too, the appreciable advantage of each having a bed; double beds seem to be the exception. Lastly, the bedding and furniture at their disposal seem to be often more comfortable and less rudimentary.

These conditions might certainly be improved, but they are none the less a higher grade in the scale of housing of labourers, and it is doubtless to the relative well-being resulting from this as much as to the ideas of order and cleanliness naturally more developed in women, that we may attribute the fact that the sleeping-rooms of women farm servants are as a rule better kept.

(c) *Labourers, carters, cowmen and shepherds.* — Here we open the most painful chapter of the inquiry. It is short, contained in a few lines uniformly repeated in nearly all the answers to the questions: "Labourers, carters, cowmen and shepherds sleep beside the cattle in the stable, the cow-house and the sheep-fold."

Thus is the rule. Its justification is the necessity of ensuring that the animals shall be watched over at night. But when one sees to what lamentable results it leads one may well ask if it is absolutely necessary, or if, on the contrary, important changes might not be made in the practice. The position of this class of agricultural labourers is certainly not to be envied, and it is easy to understand that such labourers are difficult to obtain. Taking everything into consideration, the most fortunate among them are those who, in summer, go with the cattle to the pastures, and if they do not sleep in the open air, find shelter for themselves alone in the mountain chalet or the moveable cabir of the shepherd. But let us return to the cow-house.

The beds are placed in one of the stalls beside the animals, often without a separating partition. Or else the bed is suspended from the ceiling, or raised on boards supported by four stakes, and in that case it is reached by a ladder.

The bed scarcely deserves the name. When it is not an old wooden bedstead it is made of boards fitting together more or less closely on which are thrown a straw mattress, a feather bed, a sack of oats or some maize straw, and some blankets, which soon become dirty. In such beds stablemen or cowmen sleep often two together.

It is not difficult to guess what are the possibilities of sanitation and the ideas of cleanliness with such sleeping accommodation. The pump in the yard serves for ablutions which are not always daily. One answer to the inquiries made confessed that in that district labourers and cowmen "washed and dried themselves as best they could."

But in the midst of this dreary picture some brighter spots appear which seem to prove that reforms are possible. In one place the bed in the stable is isolated by a wooden partition. In another a small closed room is arranged in the stable with which it communicates by a glazed door, thus enabling the men to watch over the animals. In some districts the large proprietors have not been afraid to put down the custom of sleeping among the animals except at the time of calving, and to lodge their stable men, carters or cowmen in a building adjoining the cow-house.

(d) *Day labourers and seasonal labourers.* — There is little to be said about this last class of agricultural labourers.

The day labourers are rarely lodged at the farm. They are generally people of the neighbourhood, living in their own homes, who engage themselves to work on the adjoining farms. Their day's work over, they go home for the night.

When lodged at the farm they are usually treated like those engaged by the year. What has been said of these last applies also to them; they are sometimes lodged in rooms, sometimes in stables, sometimes also they are given special dormitories containing many beds.

Seasonal labourers are also generally lodged collectively. They are usually grouped in large dormitories, barns, granaries or other out-buildings connected with the farm. They are seldom placed with the cattle. The sexes are generally separated. Yet the inquiry reveals that in certain districts of the south the custom still prevails, though diminishing, of lodging together in great dormitories male and female workers, men, women, and young girls, engaged for the vintage. Needless to point out the danger of this promiscuity.

The housing of the seasonal labourers leaves much to be desired. On certain farms they are given camp-beds. But more often they lie on straw or hay covered with a sheet, with or without blankets, nearly always without undressing. The means of cleanliness are non-existent or rudimentary.

§ 3. THE IMPROVEMENT OF BEDDING.

The situation which we have described evidently calls for reformation. But before considering this, we must see what light is thrown by the inquiry on the ideas of the farmer and his workmen on the subject.

Many of the answers to the questions affirm that agricultural labourers

have no ideas on the subject, that they never think of it, and that it is quite a matter of indifference to them.

It is possible that this may be true of certain districts where the general conditions of accommodation and bedding are satisfactory, as in Brittany. It may also be admitted that the habit, acquired in the family in early years, of sleeping two in a bed may make a labourer on a farm tolerate a bedfellow. It is also certain that many labourers prefer to sleep in cow-houses or stables, at least in winter, because they are warmer than the rooms. But we must not generalize from these statements respecting districts or individuals, and those correspondents would seem to be nearer psychological truth who write that the labourer accepts existing conditions because there is nothing better, but that defective accommodation tends to cause scarcity of labour. "If we still wish to find farm-servants," says the Vice-president of the Union of Agricultural Syndicates of Côte-d'Or, "we must find accommodation for them, other than the stables. It is absolutely necessary that each should have a room. Then the labourer will feel himself an individual; he will rise in his own opinion, and will take more interest in his work. He must have a place where he can do as he pleases, undisturbed by the presence of his colleagues. He must therefore have a room which is sanitary, well ventilated, and sufficiently comfortable. He will then feel himself at home, will be contented and will remain on the farm."

Similar desires exist in other departments besides Côte-d'Or. In Dordogne, in Sarthe, in the Central Plateau, the workers wish, to have separate rooms rather than sleep in the stables. In Ande and in Charente it is said that employes are growing "more and more exacting" on the question of beds. Even in Normandy, where some say that the labourers are satisfied, it must be confessed that often at nightfall they leave the stables and go to spend the night with their families.

It therefore seems that, while avoiding any preconceived ideas in one sense or another, it must be confessed that a new feeling is gradually awakening among the peasantry, that they no longer accept passively the lodging and sleeping accommodation offered them, and that they are beginning to see that things might be improved.

This new state of mind was manifested in certain recent agricultural strikes, for instance, those of Seine et Marne (August 1919) when the labourers demanded the gradual suppression of sleeping accommodation in stables or cow-houses, and the fitting up of dormitories and refectories. The same tendencies are manifest in the Federation of Agriculture which is under the patronage of the General Labour Confederation, and which comprises 200 syndicates with 20,000 members (labourers, market gardeners, woodcutters, horticulturists, vine-dressers, resin-producers from the Landes, metayers from Adour, hoop-makers from the Centre, day labourers from Beauce and Brie).

These aspirations have not escaped some of those who replied to the inquiry and who have given their views on the subject. One of them, representing Corrèze, where agricultural housing is particularly defective, does not hesitate to say that "to remedy the evil all rural buildings should

be reconstructed." It would certainly be desirable, if possible, to substitute everywhere new buildings for old. But particularly at the present time such a gigantic work could not be undertaken, and it is better to consider rather what essential improvements may be possible.

As to sleeping accommodation in stables and cow-houses, some farmers think it should be entirely given up. Others suggest improvements, prohibiting the suspension of the bed in the air, a system by which the sleeper breathes all the impure gases of the place, and isolating him from the cattle. There are different views as to the method of securing this isolation. Some think a mere wooden partition is sufficient, to prevent the cattle from ransacking the bed and disturbing the cowman in his sleep. Others have a better idea, that of a small room in the stable, but separated by a brick partition, ventilated from outside, and communicating with the stable by a glazed door.

With regard to the fitting up of sleeping-places in the farm-house, more sanitation, cleanliness and comfort are advisable. For example, plastering and whitewashing the walls, better ventilation, cupboards or chests of drawers for clothes, and wash-stands to obviate the necessity of going to the pump in the yard to wash. Where workmen sleep in a dormitory, they should take it in turn to sweep it, under the supervision of the senior man in the room; and in any case, rewards should be given for well-kept rooms.

Lastly, all are agreed in advising the absolute separation of the sexes. the abolition of double beds, the provision of iron bedsteads with wire mattresses easy to keep clean in place of the wooden bedsteads, which are nests of vermin, the supply of linen, if the individual has none of his own, and the more frequent change of sheets.

These suggestions, resulting from the observation of facts, and often supported by experience, are also those which were adopted, when made more more explicit and complete on certain points, by the Agricultural Labour Commission in its session of 19 July 1920. The conclusions of this Commission are summarized as follows.

1. For those who watch over cattle at night a room shall be made in the stable or cow-house, or in their immediate proximity.

It shall be shut off, communicating with the stable by a glazed door, and shall have a window in the outer wall for light and air. The partitions shall be constructed of air-tight materials.

2. Accommodation apart from the stables shall be arranged for those who have not the care of the animals by night.

Separate rooms shall be reserved for families. Celibates shall be lodged according to sex, in separate rooms or dormitories.

3. Rooms and dormitories shall have sufficient cubic content of air, they shall be properly closed, and have windows adapted for good ventilation and lighting.

4. The floor of the sleeping rooms shall be paved, or shall be of wood, tiles, or concrete, or covered with some other impervious material.

The walls shall be painted or whitewashed.

A closed ceiling shall be provided.

5. Latrines shall be provided close to the dwelling houses.
6. Each worker shall have a separate bed, preferably of iron.
7. For those who are engaged for the season for work of short duration, the above principles cannot be rigorously carried out. But in any case the accommodation for them must be clean and sanitary, and the separation of the sexes must be observed.

This programme seems to contain the most essential of the reforms to be introduced. We may, however, add that some large landowners have a still higher idea of their duties towards their workers. They consider that it is not sufficient to ensure to the farm labourers, at least to those who are permanent and to families, sanitary and moral accommodation. They must be assured of a comfortable and healthful lodging, which will attract them to the land. Nothing will be more effectual, say these landowners, than to give them small houses near the farm, with a little garden where they may feel the charm of a personal and independent home. This idea has been realized in an original and ingenious manner by some landowners who have profited by the rural exodus to buy small deserted cottages, which they have repaired and fitted up, and in which they have installed agricultural labourers with their families.

Nevertheless private initiative has not been so active that government intervention should cause any surprise.

In fact, a bill was brought forward in the Chamber of Deputies, on 18 December 1917, by M. Emile Dumas and a certain number of his colleagues of the socialist party. Under the modest title of "Bill for suppressing the use of straw as sleeping accommodation in agricultural establishments" it goes far beyond the limited object ostensibly assigned. In fact it includes the questions, not only of sleeping on straw, but also of sleeping in stables or cow-houses, of the fitting up of dormitories, of the materials to be employed for them, of keeping them in order, of the necessary number of cubic metres of air-space, of the height of ceilings, and of the condition of beds. It enjoins on labour inspectors to see that the laws are observed, and inflicts fines for infractions.

A charge has been brought against some of these provisions that they enter too much into detail. The Labour Commission of the Chamber of Deputies on the report of M. Parvy (session of 5 February 1919) has reduced the bill proposed by M. Emile Dumas to much more modest proportions. When incorporating it into Book 2 of the Labour Code, it is limited to the prohibition, except in the case of night-watchmen, of sleeping in stables and cow-houses. The rest is left to regulations to be issued by the public administration which shall determine the general conditions of the lodging of paid labourers on farms. We may add that a government bill is in preparation at the Ministry of Agriculture to which reference will be made later.

MISCELLANEOUS INFORMATION RELATING TO THE ECONOMIC AND SOCIAL CONDITIONS OF THE AGRICULTURAL CLASSES.

AUSTRIA.

DISABLED EX-SERVICE MEN IN AGRICULTURE. — *Land- und Volkswirtschaftliche Mitteilungen*, 24th year. No. 1. Linz, 1 January 1921.

The law for the Employment of Disabled ex-Service Men (*Invalidenbeschäftigungsgesetz*), published in the Bulletin of State Laws, No. 459, came into force in Austria on 15 October 1920. In accordance with this law, agricultural and forestry undertakings are obliged to employ at full wages at least one disabled ex-Service man for every 20 permanent workers and at least one other disabled man for every 25 other workers. The application of the law will be watched over by a commission on which the disabled men, the employers and the workers will be represented.

FRANCE.

WAGES AND DISTRIBUTION OF FOREIGN AGRICULTURAL LABOUR. — DE QUELQUES DÉTAILS À CONNAÎTRE SUR LA MAIN-D'ŒUVRE AGRICOLE ÉTRANGÈRE, in *La Main-d'œuvre agricole*. Paris, November 1920.

The foreign workers who come to offer their labour for agriculture in France are Belgians, Spaniards and Portuguese, and Italians. In giving some information about these workers, it is convenient to speak separately of each class.

(a) *Belgian Labourers*. — The Belgian labourers obtained high wages in 1920. In Belgium they received :

For ridging beetroot (2 operations), 175 to 200 fr. per hectare (without food) ; for pulling, the same sum ; for cutting the tops, 120 fr. per hectare ; for other kinds of agricultural labour, 5 fr. per day with full board or at most 150 fr. per month.

In France they have only accepted contracts fixing the following wages for the different kinds of labour :

For ridging beetroot (2 operations), 100 to 200 fr. per hectare (with board) ; for pulling, 200 fr. per hectare (with board) or 250 fr. per hectare (with drink and soup only) : for cutting the tops, 120 fr. per hectare with board or 150 fr. per hectare without board ; for other kinds of agricultural labour, 10 to 12 fr. per day with full board.

In Seine-et-Marne harvest wages of even 18 to 20 fr. per day with lodging, soup twice a day and drink are known to have been given.

Belgian emigration being free, a written contract does not always bind the labourer to the employer. But in the greater number of cases, the labourer has a written offer from his employer.

The following are the principal departments of France in which this

immigration takes place, arranged according to the extent to which it occurs: Oise, Seine-et-Marne, Seine-et-Oise, Eure, Loiret, Nord, Eure-et-Loir, Aisne, Puy-de-Dôme, Somme and Manche. Some Belgians may be found in Pas-de-Calais, Côte-d'Or, Yonne, Calvados and Marne, but as a general rule it may be said that a line drawn from the bay of Mont-Saint Michel to Geneva would form the southern limit in France within which these labourers may be met with. This does not mean that Belgians would hesitate to emigrate into other departments of France, but considerations of crops, distances and habits seem at present to be opposed to the extension of this zone.

In Belgium, officially recognized organizations undertake the protection of the migratory labourers, and where necessary, find them work. These are the Syndicate of Belgian Migratory Labourers at Ghent and the "Concordia" Labour Office. In France the two official immigration offices at Feignies (near Maubeuge) and Turcoing produce excellent results. They provide the labourer with work if he has none in prospect, they give him information, provide him with shelter if he is obliged to wait, and they give him identification papers and a written permission to travel at half-price on all the great French railway systems when seeking work.

(b) *Spanish and Portuguese Labourers.* — Spain sends every year to France a total number of 40,000 or 50,000 agricultural labourers. Portugal, where the migratory current is feeble, and has only just begun, did not send more than 1,000 agricultural labourers in 1920.

At the time of vintage especially, Spanish *coyes* are scattered through the departments of Pyrénées Orientales, Aude and Hérault. The *coye* is composed of several families going together to the same employer or to the same district to work at the vintage. This gang comprising men, women and children, is placed under the direction of a foreman. It is calculated that 15,000 Spaniards come into France in this way every year from 15 August to 15 September when they return home.

The Spaniards and Portuguese earned in 1920 for ordinary work 10 to 12 fr. per day and 2 litres of wine, or 6 fr. per day with full board; for vintage 17 fr. per day and 2 litres of wine for men, 9 fr. per day and 1 litre of wine for women, and 5 fr. per day for children.

Spaniards and Portuguese migrate to every part of France. They are met with in 54 departments, but those in which they are most frequently found are Hérault, Aude, Pyrénées Orientales, Loiret (wood-cutters), Aisne, Gard, Gironde, Haute Garonne, and Côte-d'Or.

The frontier is open to all labourers provided with contracts, and whose moral character is good. Even those who, without a contract, are seeking work, find at the immigration offices of Hendaye (for Spaniards and Portuguese) and of Perpignan (Spaniards only) offers among which they have only to choose.

(c) *Italian Labourers.* — The average wages offered in France to Italian labourers in 1920 were from 180 to 200 fr. per month with board and lodging, or 10 to 12 fr. per day with one or two litres of wine, but without food.

The following wages are, however, known to have been paid: for

sawyers, 15 fr. per day with lodging (Bouches-du-Rhône); for carters in forests, 400 fr. per month with board (Corsica); for farm labourers 20 fr. per day without board (Gard); but these are exceptional wages.

The departments which receive the greatest number of Italian agricultural immigrants are, in order of importance: Var, Alpes-Maritimes, Bouches-du-Rhône, then Vaucluse, Hérault, Var and Pay-de-Dôme. In about 30 other departments Italian labourers may be found, but in small numbers. Italian migration, free before the war, has been regulated by the Franco-Italian Convention of 3 September 1919. By this Convention the Italian government retained the monopoly of the emigration of its subjects. To obtain Italian agricultural labourers the French government is obliged to centralize the demands for labourers, which are made strictly in the official form adopted by both the French and Italian governments. These demands are afterwards transmitted to the Royal Commissariat of Emigration in Rome, the only official body undertaking to find labourers.

As on the Belgian and Spanish frontiers, the immigration offices at Modane and Mentone receive on the Italian frontier all offers of employment from agriculturists in search of labourers, and procure work for labourers who have not already secured it.

SPAIN.

A COLLECTIVE LABOUR CONTRACT IN THE CULTIVATION OF CITROUS FRUITS
— INSTITUTO DE REFORMAS SOCIALES: EL CONTRATO COLECTIVO DE TRABAJO DE LA PLANA. Madrid, Minuesa, 1920.

The plain of Castellón is a small district of about 400 square km. but it represents one third of the whole area devoted in Spain to the cultivation of citrus fruits.

Since the 18th century the land in this districts has been devoted to the growing of citrus fruits, so that it is now richer than any other district in the number of trees. In some places in the plain of Castellón the estates are directly cultivated by the owner, in others the land is let, in others again the land is cultivated on the produce-sharing system. It is calculated that the annual production of the district is about 26 million pesetas.

During the first half of the 19th century citrus fruits were produced only for home consumption, and for the coasting trade, and it was not until 1854 that exportation to the French markets was of any importance. In process of time the trade extended to the English markets, which are now supplied from Spain to the extent of four fifths of the whole consumption.

The work of gathering the fruit, which is done by groups of women and children under a foreman, and the carriage to the packing-houses, performed by means of trains of carts, did not involve serious expense, but the controversies which arose between the employers and the workers regarding the rate of wages and the conditions of labour showed the necessity of studying and solving a problem of such importance for a large number of proprietors and workers, before the orange season of 1920-21.

Upon the proposal made by D. Salvador Muñoz Perez, the Minister of Labour by a decree dated 14 September 1920, enacted that the *Instituto de Reformas Sociales* should nominate two members who should represent the Ministry at every conference held to discuss a collective labour contract for the region of La Plana. The first conference convened for this purpose, that of the provincial Federation of labourers engaged in agriculture and similar employments was held on 17 September of last year, and was followed by those of the Catholic Syndicates of La Plana, and of the employers and labourers. The chief subjects discussed in these conferences were the fixing of the number of workers to be employed in the different branches of the citrous fruit industry, the conditions of labour, the amount of wages and freedom of contract; in each the necessity was recognized of a special commission for establishing a collective labour contract.

The first collective labour contract in the cultivation of citrous fruits drawn up in La Plana is based on a lofty conception of social pacification, and offers a sure guarantee for resolving peaceably and harmoniously controversies arising from the relations between employer and employed and the Spanish Government, recognizing its efficiency, arranged for its publication in the *Gaceta de Madrid*, and gave it the force of law.

This contract is only valid for the season of 1920-21. Its chief clauses may be summed up under the following heads; complete freedom of contract and labour; the fixing of wages, which in no case may be reduced below the minimum or raised above the maximum laid down by the conferences, to be entrusted to special commissions composed of representatives of employers and employed; length of the working day on the basis of the Royal Orders of 15 January 1920 and of the Royal Decree of 3 April 1919.

Local commissions composed of an equal number of representatives of employers and of workmen were appointed in suitable localities as courts of first instance for the settlement of disputes arising out of the interpretation of the contract. Provincial commissions were also appointed to which appeal may be made from the local commissions. As a final appeal the parties may have recourse to arbitration by the *Instituto de Reformas Sociales*.

It is noteworthy that after the stipulation of the collective labour contract, the employers and workers pledged themselves to give up respectively the right to lock out and the right to strike.

SWEDEN.

AGRICULTURAL WAGES IN 1919. — SVERIGES OFFICIELLA STATISTIK: ARBET ARTILLGANG, ARBETSTID OCH ARBETSLÖN INOM SVERIGES JORDBRUK ÅR 1919 (*Swedish Official Statistics: Supply of Labour in relation to demand. Working Hours and Wages in Swedish Agriculture in 1919*). Stockholm 1920.

The official inquiry into the supply of labour in relation to demand and into working hours and wages in Swedish agriculture in 1919, has based its calculations on two series of documents. The first series is a set of detailed inquiry forms filled in by the presidents of the communal assemblies in

2,229 rural communes, that is to say 95.8 per cent of the rural communes comprised in the inquiry. The second series is composed of reports collected directly from employers and agricultural labourers by means of their respective organizations. Of these reports there were 463 for employers and 314 for workmen. For the most part they come from the provinces situated round Lake Maelar and from the more southern parts of the country (Scania) where organisation is most developed.

The Supply of Agricultural Labour in relation to Demand. — The first question on the list was as to the relation between the supply of and the demand for agricultural labour in each rural commune. The answer had to take the form of a general survey, showing whether the agricultural labourers living in the locality or coming there regularly could be considered as furnishing sufficient labour for the whole of the agricultural work to be done, and was to be given in one of the following words : good, sufficient, insufficient. The results show that in 139 of the communes which have answered, that is to say, in 6.2 per cent., the supply of labour was good; in 1,301, or 58.4 per cent., it was sufficient, and in 714, or 32.0 per cent., it was insufficient; 75 communes, or 3.4 per cent., were unable to give a definite answer. Comparing this with the previous year the figures show an improvement as regards the supply of agricultural labour.

Working Hours. — As regards working hours the present report gives data as to three classes of agricultural labourer, viz. agricultural labourers properly so called, that is to say, those who work in the fields, in the barns, on the threshing-floors, etc. ; the carters, whose chief duty is to drive the draught animals needed in farm work, but who must usually also groom the horses and clean the stables ; lastly those who have charge of the live stock. We give here information on the working hours of these three groups of workers, based upon the answers given by the presidents of communal assemblies ; on the one hand during the summer (by summer is meant the busy agricultural season, that is, the three months of summer when work usually begins earliest and leaves off latest), on the other hand during the winter (that is, the three winter months when the days are shortest, and work begins latest and leaves off earliest). The report also gives corresponding particulars, from data supplied by employers and labourers, exclusively concerning the working hours in summer.

If we first consider the particulars based upon the reports of presidents of communal assemblies, we shall see that for agricultural labourers properly so called, the gross working hours per day (that is, the hours of work including off-time) were in summer 12 hours 6 minutes ; the off-time was 2 hours 12 minutes ; the net amount of the working hours after subtracting the off-time was therefore 9 hours 54 minutes on an average for the whole of the country. During the winter the gross working day was of 9 hours 6 minutes; the off-time was 1 hour 18 minutes, and the net working day was 7 hours 48 minutes. But the time and division of work vary considerably in different parts of the country. There are two special zones : on the one hand three departments of the south (which form the provinces of Scania and Blekinge), on the other, the departments situated round Lake Maelar,

where the working day is shorter in summer and longer in winter than in the other parts of the country. Inquiries as to working hours during summer have been made for nine years, and as a result a distinct tendency may be observed to shorten the working hours, especially in those localities where the working day had been relatively long. During the year 1919 alone, the average length of the working day diminished by 12 minutes.

When carters are expected, as on many farms, to groom their horses before beginning farm work, a job which takes from half an hour to an hour and a half, their working day is longer by that time than that of the other farm labourers. But the same working hours are often put down for the two groups, either because the time given to the care of the horses is not counted in the working hours, or because the carters begin work a little later than the agricultural labourers properly so called. It follows that the average working day of carters is only slightly longer than that of the agricultural labourers properly so called.

The length of the working day for those in charge of live stock is almost the same throughout the year. On an average the gross working hours throughout the country were 13 hours 48 minutes per day in summer, and 13 hours 18 minutes in winter. The working day is thus very long, but during certain hours the work consists only in herding and watching, and those employed in this way have plenty of time to rest and take their meals. Consequently it is rather difficult to specify exactly the off-time. It is calculated at about 3 hours for both summer and winter, giving a net working day of 10 hours 48 minutes, and 10 hours 18 minutes respectively. It may be observed that on many farms during the summer months the work of carters and of agricultural labourers properly so called, ceases on Saturdays from half an hour to two hours earlier than on the other five working days of the week, and that there are sometimes extra hours of labour, especially in the more southern agricultural districts of Sweden.

The data supplied by the employers and the labourers agree in their main lines with those supplied by the communes, while presenting certain characteristic differences. They agree as to the length of the gross working day during the summer, 11 hours 54 minutes, but on the contrary they differ in their estimate of the off-time, the labourers calculating it at 1 hour 48 minutes on an average, and the employers at 2 hours, so that the net working hours are estimated respectively at 10 hours 6 minutes or 9 hours 54 minutes per day. With regard to the carters and the extra time which they must devote to the care of the horses, the estimate of the labourers is higher than that of the employers; the gross working day would be on an average 12 hours 30 minutes according to the employers, and 12 hours 54 minutes according to the labourers, and the net working days are respectively 10 hours 24 minutes and 10 hours 54 minutes.

For those employed in the care of the live stock the working hours, difficult to determine, would be on an average, according to the employers, 13 hours 48 minutes (gross) and 10 hours 12 minutes (net) per day, but according to the labourers they would be respectively 14 hours 24 minutes and 11 hours 12 minutes.

Wages. — Since the object of this inquiry was only to give a general impression of the agricultural labour market of the whole country, account has been taken only of the conditions common to all Swedish agriculture, setting aside the differences obtaining on this point in the various regions.

Figures are therefore only given for the wages of a small number of groups of the more important labourers all over the country, or at least in the greater part of it. Further, as the inquiry deals only with general averages, and not with individual cases, it seemed possible to give the precise rate of wages only of the less skilled and less paid of these groups, that is, of those whose wages are generally fixed by local custom; not of the specialized workers, or for bailiffs whose wages depend on their personal capacity. The wages paid to labourers of the different categories above mentioned differ widely in the different districts. But taking the country as a whole the data supplied by the presidents of the communal assemblies give the following results:

As regards unmarried farm servants, who form the most important source of labour of small farmers, their remuneration consists of yearly wages in money, together with board and lodging. The amount of these various forms of remuneration differs considerably according to the regions: but for the whole country the average wages of a male farm labourer are 884 crowns per year; the food is valued at 1,019 crowns (2.79 crowns per day) so that the total remuneration is 1,903 crowns per year. For a female farm hand, the corresponding averages are 502 crowns, 818 crowns (2.24 crowns per day) and 1,320 crowns. Clothing is also given, especially in Norrland, and this sometimes represents a considerable sum.

The male labourers, usually married, who, under the name of "*statare*" (agricultural labourers paid partly in kind), work on the large estates of the purely agricultural regions, and besides their yearly wages of 826 crowns on an average, receive remuneration in kind called "*stat*," consisting of milk, corn, potatoes, etc., and are provided with a house for themselves and their families, earn on an average 2,088 crowns per year (according to the valuation of those persons who have supplied the data). In this amount is included the value of the free house, which in southern Sweden usually consists of two rooms and a kitchen, but in the rest of the country generally of one room and a kitchen. The rent of the house is valued at 133 crowns, to which must be added the value of the free fuel, estimated at 146 crowns on an average. These wages are only applicable to ordinary ploughmen; those labourers called *statare* who are in charge of live stock receive higher money wages, and sometimes also higher wages in kind, so that their annual earnings are valued at 2,208 crowns.

Besides the *statare* there are day labourers with permanent work, who are not paid in kind, or are only so paid to a much smaller extent, and whose daily wages vary considerably in the different regions. This daily wage amounts on an average to 7.36 crowns in summer, and 5.90 crowns in winter, but it is less by 2.41 crowns and 2.25 crowns respectively if the labourer is boarded by his employer.

Besides the day labourers, who have usually agreed to work for a year,

or at least six months for one employer, there are others who work sometimes for one farmer, sometimes for another, according to the needs of the moment. In summer, the average daily wages of these men are 8.58 crowns, and in winter 6.72 crowns, food not included. If the employer boards them their wages average 5.76 crowns in summer, and 4.33 crowns in winter.

Among the workers paid by the day there is also a large number of women employed to help in the cultivation of beetroot and potatoes, and in harvesting hay, wheat etc.; they receive on an average 4.34 crowns per day in summer (or about 2.91 crowns with board) if permanently employed on a farm. If they are only extra hands, their wages are rather higher in summer: on an average for the whole country 4.82 crowns without board or 3.22 crowns with board. During the winter months the daily wages diminish considerably both for men and women day labourers.

From 1913 to the end of 1919 the total wages of servants have increased by 170 or 180 per cent., and for labourers paid partly in kind 190 per cent., and the daily wages of day labourers show an increase of from 166 to 207 per cent. Since the end of the war, the rise in wages has been less; only about 20 per cent for the year 1918-19, as compared with 40 per cent for 1917-18.

When we compare the figures of the wages as given respectively by employers and labourers, we find, as might be expected, that the latter are generally lower than the former. For labourers by the year — servants (men and women) and labourers paid partly in kind — who receive payment in kind the estimates of money wages made by labourers are less by 3 or 4 per cent than those made by employers. On the other hand, the two parties are agreed as to the value of the remuneration in kind, which reduces the difference to 2 per cent. in calculating the total earnings. Remuneration in kind has not given rise to any important divergence of opinion as to milk, cereals, and other agricultural produce given as part payment, but as regards the value of lodging and fuel the valuation of the labourers is 20 per cent. lower than that of the employers, and the divergence as to the total sum of the wages of this class is about 6 per cent. For daily wages the valuation made by the labourers is from 7 to 10 per cent. lower than that made by the employers.

II. — LAND SYSTEMS

PORTUGAL

ALIENATION AND DIVISION INTO LOTS OF UNCULTIVATED LANDS BELONGING TO THE STATE AND ADMINISTRATIVE BODIES.

SOURCE:

DECRETO N. 7: 127, AUTORIZANDO O ESTADO, CAMARAS MUNICIPAIS E JUNTAS DE PAROQUIA A DIVIDIR EM GLEBAS E A ALIENAR, NO TODO OU EM PARTE, OS BALDIOS QUE LES PERTENCEM, DESDE QUE NÃO SEJAM DESTINADOS, POR UTILIDADE PUBLICA, A ARBORIZAÇÃO E SEJAM PROPRIOS PARA A CULTURA AGRICOLA — *Diário do Governo*, 1st Series, No 233 Lisbon, 17 November 1920

We have already had occasion to point out some of the more important measures adopted by the Portuguese government to intensify agriculture and to obtain a larger cultivation of cereals and other food-stuffs of which the necessity is recognized.

We shall now consider a new measure more general in character and for the same object, which came into operation with the Decree No. 7: 127 of 17 November 1920.

By this decree, the State, the municipal councils and the parish councils are empowered to divide into lots and to alienate, either as a whole or in part, the uncultivated lands belonging to them, provided that they are not to be afforested for reasons of public utility, and that they are adapted for cultivation.

§ 1. ALIENATION OF THE LANDS. PERSONS WHO HAVE THE RIGHT
TO HOLD AND CULTIVATE THE LOTS.

The alienation of the lands may be effected by the public bodies in question in two ways, either by regular sale by public auction, or by contracts of emphyteusis under special regulations to which we shall presently refer. The law enacts that the lands shall be sold or granted in lots. But the public bodies must proceed to the division of such lands, before beginning the alienation.

The lots must be of equal productive capacity, present like conditions of cultivation, be of a regular geometrical form, and of easy, direct, and independent access. Their area must vary according to the topography, the nature of the soil and the local or regional conditions which may dif-

ferentiate them. These lots must also be adapted to the formation of "homesteads," the installation of agricultural industries, and the construction of permanent dwelling for families consisting, on an average, of four persons.

According to the law the persons who obtain lots must be heads of families, of either sex, with a knowledge of the cultivation practised in the district, enjoying full civil rights, married, or having depending upon them relatives either of an older or younger generation, or failing these, orphans or foundlings.

Among heads of families those will have the preference who for more than five years have lived in the locality where the uncultivated land is situated, and who have in conformity with local custom, shared in the use of it. Under similar circumstances preference will be given to those heads of families having the largest number of children under age, and to soldiers who have taken part in the African and French campaigns.

To persons related in the second degree the law gives only one lot, unless such persons are of age, and have descendants capable of agricultural labour.

§ 2. SPECIAL REGULATIONS FOR THE GRANTING OF LOTS IN EMPHYTEUSIS.

The granting of a lot in emphyteusis will be considered definite only at the expiration of five years from the date of the agreement. If at the end of that period, one half of the plot at least is not under cultivation, the agreement is annulled, and the holder loses all rights to any benefit whatever.

The rent will be redeemable at twenty years' purchase if one half of the plot has been brought under cultivation or at fifteen years' purchase if the whole has been brought under cultivation.

The redemption may be effected even before the expiration of the five years, should one half or the whole of the land have been under cultivation before the end of that period.

Payment of the rent is not required for the first three years of the provisional agreement. Emphyteusis agreements are exempt from registration tax, and the occupiers of land held under such agreements are for the first five years exempt from land tax.

In the first ten years from the date of the emphyteusis agreement, every contract which would result in the alienation of the lot granted in emphyteusis is null except in the case of alienation made with the object of creating a "homestead" for the holder's own benefit or that of his descendants according to the terms of decree No. 7 : 033 of 16 October which introduced the "homestead" system.

Those who have received a grant of land in emphyteusis are obliged to build a dwelling house on the land, if they are living at a distance from it of more than four kilometres. On the other hand they have the right

to use the water springing from the uncultivated land, which is to be equitably distributed among the occupiers of land held in emphyteusis, the principal spring remaining common property.

They may, however, make use of spring water and river water only in such quantities as they may require, and they are obliged to leave what remains to their neighbours. The examination, canalization, and utilization of the spring must be at their expense, calculated in proportion to the water they use.

Lots in emphyteusis are declared perpetually indivisible, except in cases when they must be expropriated for reasons of public utility, whether for the extension of an urban zone, or for the construction of dwelling houses or of industrial and agricultural establishments.

Except in these cases, the lots are therefore always transferred in their entirety, whatever be the form or title of transfer.

The owners of lots may dispose of them in favour of their legal heirs or of any successor without prejudice to co-heirs or other interested persons, who will have no right to demand the division of the lot, but will have a right to the compensation fixed by law for such cases. Should the owner die intestate, or fail to state in his will to whom he wished to leave the land, the heirs, or persons interested, may make, with regard to the lot, such arrangements as they may think best, but without prejudice to its indivisibility; if an inventory should be made of the inherited property it must indicate the person to whom the indivisible lot is assigned, and those to whom compensation must be paid.

§ 3. CONCESSIONS TO CO-OPERATIVE SOCIETIES AND PRIVATE CONTRACTORS.

Syndicates, societies, companies, agricultural co-operative societies, and any private contractor intending to employ on uncultivated land a certain number of labourers who are heads of families according to the conditions of the decree, may obtain a grant of land by observing certain conditions.

They must bind themselves to divide the land into lots, to be afterwards granted in emphyteusis in accordance with the provisions of the decree, and must show that they possess available capital sufficient to settle upon the land itself at least three good labourers chosen from heads of families.

In contracts of this kind, which in no case must comprise areas inferior to 100 hectares, the State and the administrative bodies will give up, for the benefit of the contractor, half the amount of the rent and of the payments for redemption for the space of thirty years.

The societies or private contractors above mentioned may also break up and cultivate directly the land granted to them, postponing to a time not exceeding twenty years from the date of the contract, the division into lots and the granting of the lots in emphyteusis to the cultivators.

The contract will state the number and the extent of the lots into which the land is to be divided. The amount of the payments due from individual cultivators to whom lots are to be assigned, shall be fixed by the Agricultural Development Board in agreement with the contractor, on the basis of the value of the produce of the land, and the cost of cultivation at the date of the division. Should they be unable to agree, an umpire, nominated by the local judge, shall decide the question. The contractor has power to reserve for himself or for an agriculturist of acknowledged capability, a lot to serve as a model to those who cultivate the remaining land. This lot may be of twice the area of the other lots.

Fines not less than \$ 30 per hectare of the land granted may be imposed on those who fail to comply with the conditions of the contract.

These concessions, which may comprise vast tracts of land on which large and complex agricultural enterprises may be established are undoubtedly of special importance, and for them the decree gives special rules of procedure worthy of notice.

The above-mentioned societies and private contractors must make request for concessions addressed to the Agricultural Development Board or to the proper administrative body, accompanying the request with a plan of the division of the land into lots, and with an explanatory memorandum. In the communal administration or the office of the administrative body the application and the programme of cultivation must be exposed to the public. In this must be indicated the object for which the land is to be divided, the principal work to be done on it, and the rights and benefits of the agricultural labourers employed. It must also contain a series of questions drawn up in clear and precise terms, as to the advantages and disadvantages that may arise from the carrying out of the plan, and the guarantees to be required in the general and local interest. The above-mentioned plan and the annexed documents shall be exposed to the public in the communal administration or at the office of the administrative body for 30 days. According to the decree every one is at liberty to answer the questions in the prospectus, in order to elucidate with further information the subjects of the inquiry.

Within thirty days, dating from the expiration of the time of the inquiry the Agricultural Development Board or the administrative body shall decide whether the request of the society or private contractor shall be granted or not.

If the reply be affirmative, any alterations to be made in the plan must be indicated, before it becomes a definite scheme of which the carrying out will become compulsory.

The definite scheme must be consigned to the Agricultural Development Board or to the respective administrative body within fifteen days from the date of its acceptance.

The contract must be stipulated within five days after the definite scheme has been accepted and must be drawn up in the terms of the decree.

§ 4. CERTIFICATE OF OWNERSHIP.

According to the decree an emphyteusis agreement must be transcribed in a special register with a declaration of indivisibility, in the land registration office. When, after five years, the agreement becomes definite, the holder of the lot may apply for definite registration, if no complaint or opposition has been made while the agreement was merely provisional.

When his agreement has been thus registered, the occupier of land held in emphyteusis may apply for a title of ownership which will be granted by the land registration office, but only if no well-founded opposition has been made to the granting of such title.

The title of ownership shall contain the description of the property, a statement of the way it is cultivated and a description of the buildings upon it, as well as a statement of the rights and charges by which it is burdened. The title having been registered, the proprietor will receive a certificate of title containing the plan of the lot, and the charges on and transfers of the land shall be successively endorsed upon it.

The certificate will form the fundamental title to the land.

It may be sold, given away or pledged, like any title to moveable property, by simple endorsement, without requiring any public instrument. The endorsement indicated by the nature of the transaction effected with regard to the land, is not valid unless registered on the title.

The taxes due on transactions made by means of such a certificate are paid in stamps.

§ 5. CENSUS OF UNCULTIVATED LANDS.

Lastly, in order to facilitate future proceedings with regard to the alienation of uncultivated lands, such as the decree contemplates, it provides that regions and their divisions will be subject to a general census of the uncultivated lands contained in them by districts and communes, and also of those uncultivated or forest lands which by the terms of the decree of 1920 have been expropriated for reasons of public utility.

The General Finance Office, the municipal councils and the parish councils are to transmit to the Agricultural Development Board of the Ministry of Agriculture a report concerning the uncultivated lands belonging to the State and the administrative bodies, with all indications necessary for their identification. The census will be made on the basis of the various ownership of the lands, which shall be thus divided :

- 1) Uncultivated lands belonging to the State.
- 2) Uncultivated lands belonging to parish councils.
- 3) Uncultivated lands belonging to municipal councils.
- 4) Uncultivated lands belonging to private individuals, which have been expropriated.

Notes are to be added containing a summary of the description of the land, and indicating the different crops which they can most profitably produce.

The planning and drawing up of schemes of alienation will be entrusted to the General Bureau of Drainage, Irrigation, Colonization and Agricultural Physiography.

MISCELLANEOUS INFORMATION RELATING TO LAND SYSTEMS.

ARGENTINA.

THE AGRICULTURAL COLONIZATION OF THE PAMPA — DENIS (Pierre): Deux ans en Argentine, in *Revue de Paris*, 1 January 1927.

M. Pierre Denis, who for two years has occupied the chair of geography in the University of Buenos Aires, considers that it is in the Pampa, within a radius of 500 or 600 kilometres round Buenos Aires that the phenomenon of colonization in its typical form can best be studied. The expansion of agriculture over new lands towards the west, the changes in the old methods of cultivation even in the older lands, the influx of immigrants which has renewed the population, have been so rapid that it is rare to find any person who can retrace the history of the colonization in one canton, even for the last fifteen or twenty years.

Colonization has formed in the Pampa natural regions clearly distinguishable from each other. In proportion as it has become more dense and more industrious it has brought to light by degrees the variations in physical surroundings which had long remained unobserved; every crop, every method of rural cultivation is concentrated in its chosen zone. M. Pierre Denis distinguishes at the present time in the whole Pampa the following regions :

(1) The first, in the north, comprises the central part of the province of Santa Fé. In the Argentine Republic it is known by the name of "the region of colonies." Here two generations ago arose agricultural colonization; it developed rapidly, showing remarkable power of expansion, especially from 1880 to 1895. Corn and flax are grown in the colonies. The land is now divided like a chess-board by hedges of service-trees planted so as to surround the fields; in comparison with other parts of the Pampa which have remained quite bare of vegetation it might be called a grove. The colonists are proprietors; the farms are of small extent, being from 50 to 100 hectares. The houses are comfortable, surrounded by an orchard and kitchen garden. The farmer is often at the same time a cultivator and a stock-farmer on a small scale; to feed a few cattle he sows lucerne in the lower grounds which are not adapted for wheat, and were for a long time despised.

(2) South of the region of colonies extends that of maize, the boundaries of which describe round Rosario an arc of a circle whose radius is from 100 to 150 kilometres. It borders the Parana between 32° south latitude and the Baradero. It is *par excellence* the arable land of Argentina. The soil is

dark red, clayey and strong. The summer rains are abundant and favourable to maize. The cultivation of maize on a large scale is more recent than that of wheat, dating only twenty-five years back. The cultivators of wheat have not mingled with the cultivators of maize. The population of the maize region has no elements borrowed from that of the colonies. It is composed for the most part of immigrants recently arrived from Italy and Spain. It is the most dense of the whole region of the Pampa, exceeding fifteen inhabitants per square kilometre. The heavy soil, in fact, requires more labour than the light soil of the West; harrowing and weeding must be repeated frequently, and in harvest time, the cobs of maize must be gathered by hand. The farms are small, generally about 50 hectares. The land was not divided at the time of the agricultural colonization, as, owing to stock-farming, its value was already too considerable for immigrants to purchase. A rural proletariat, often far from docile, has grown up on the lands, which are held in tenancy. The return per hectare is high; stock-farming has been rapidly eliminated; certain departments have lost in six years, from 1908 to 1914, four-fifths or five-sixths of their sheep. The breeders, driven away by the increased rent of the land, have gone west or north.

(3) The third region, much more extensive than the preceding, is that of lucerne. It comprises the whole north-west angle of Buenos Aires, and the south-west of the province of Córdoba. On the San Rafael railway the fields of lucerne extend as far on the west as the limits of the Pampa, and reach the edge of the wooded country. In all this zone the lucerne covers 15 to 25 per cent of the total area. The lucerne zone is in the main a great zone for the breeding or fattening of horned cattle; but it is also agricultural. The progress of agriculture is there closely connected with the formation of lucerne-fields. This work is entrusted to settlers who cultivate the land for four or five years, gather harvests of wheat and flax, and at the end of their lease must restore it sown with lucerne to its owner. By means of similar agreements the lucerne fields, when exhausted by being grazed, are formed afresh and thus the land is periodically restored to the plough. The area cultivated is nearly fixed, taking the whole region together, but agricultural colonization is periodically removed from one sector to another, causing by its displacement sudden changes in the traffic of railway stations and the development of urban centres. Not only is it true that the cultivator does not become proprietor of the soil, but he only settles for a short time, and remains a true nomad. The dwellings are of a provisional character which is at once noticeable. Those who clear the land in the lucerne district are generally recruited in the region of the colonies of Santa Fé, where the new generation is beginning to feel somewhat crowded.

(4) The south-west of the province of Buenos Aires and the central Pampa, form the wheat zone. It is a drier country; in fact the rains diminish regularly the farther we advance towards the south-west. A layer of limestone lies under the soil not far below the surface. Should the winter or spring rains fail, the crops may be seriously injured. The expansion

of wheat in this zone only began about 1898. The mediocrity of the return is compensated by the extent of the farms and the small cost of labour. The substitution of cultivation for stock-farming is much less complete than in the maize zone; sheep feed on stubble and waste ground. The number of sheep is now only half the number in 1895, at which date the sheep-farmers were the sole masters of these lands. The population of the wheat zone comprises Europeans recently landed, and colonists from other parts of the provinces of Buenos Aires and of Entre Rios; it is possible still to distinguish two elements of immigration at different dates, superimposed one upon the other — sheep-farmers and agriculturists.

(5) Lastly, the eastern part of the province of Buenos Aires, north of the Sierra of Tandil, is the only part of the plain of the Pampa where agricultural colonization has not penetrated. The land is low and ill-drained, the vegetation has undergone no change except the progressive improvement due to the prolonged stay and the trampling of the stock. It is now the great region for stock-breeding properly so called, that is for the production of animals, many of which are afterwards fattened in the lucerne zone. It will doubtless become more and more the zone of dairy farming; cows indeed form a larger proportion of the animals than in the rest of the Pampa, and more especially than in the lucerne zone, where calves and bullocks are fed by preference.

M. Pierre Denis draws the following conclusion from this analysis: at the time when agricultural colonization was beginning, it was generally considered in Argentina that agriculture was a superior method of working the land, and that the Pampa would gradually pass from the pastoral to the agricultural cycle. This idea was false. The only region where it seems to be confirmed by facts is that of maize. The general law is, on the contrary, that the progress of colonization develops a mixed method of working, in which agriculture and stock-farming are both represented, either alternating with one another in a sort of periodical rotation, as in the lucerne region, or in a still closer association, the agriculturists devoting part of their time to stock-farming, as in the region of the colonies of Santa Fé or in the wheat region south of the province of Buenos Aires.

Colonization also appears as a complex phenomenon, depending at the same time on physical conditions and on factors of a purely economic and social order. It is the more rapid as it requires less labour and capital. From 1875 to 1890, immediately after the pacification of the Pampa and the submission of the Indian tribes, the stock farmers abruptly invaded an immense territory. This rapid extension of stock farming was only possible because cattle were then of small market value; for want of a market the new lands were given over to sheep.

Stock farming has at present the advantage over agriculture of requiring fewer labourers, but it necessitates a larger capital. Among crops, where the conditions of soil and climate are equally favourable, wheat is better adapted to colonization than maize, because the preparation of the land and the crops is made according to more rapid methods, and a given number of colonists can cultivate a larger area in wheat than in maize.

M. Picrre Denis adds that colonization is not an individual movement, as the colonist seldom has the necessary capital at his disposal. The office of contractor for colonization is sometimes undertaken by the landowners themselves, who sell their land in small plots, or by colonization companies, who buy land to be divided into lots, or more often by merchants who give credit to the colonists whom they have established, on condition that the colonists shall buy their goods and entrust them with the sale of their crops. The rush of colonists to Santa-Fé was partly determined and supported by a parallel migration of merchants enriched in the older colonies who thus extended their trade. The merchant contractor of colonization often becomes the intermediary between the landowner and the colonist, guaranteeing to the former a fixed rent for his land, and receiving from the latter a certain percentage of his crops.

Colonization is, so to speak, guided by speculation in land. Speculation discounts the labour of the colonist, and attributes to the land a value, not founded on the profit which it has yielded, but on that which the speculator calculates that it may yield in the future.

The colonist, even should his agricultural accounts not show a profit, may realize profit if the land should increase in value. The increase of his capital conceals from him the mediocrity of the returns, so much the more because he can easily obtain from mortgage banks advances on the value of his property, which allow him annually to turn his wealth into cash. Speculation is carried on more especially on the new lands, on the borders of the zone already colonized, in which the farmers are generally themselves the owners of the land. The speculators, who have paid a high price for these new lands, seek rapidly to organize their cultivation. It is partly owing to their influence that colonization continually extends its domains instead of being concentrated in regions long occupied, where it might sometimes be more productive.

Lastly colonization progresses only where it finds a market for its produce. The home markets were soon insufficient for the agriculturists of the Pampa; they then produced for exportation. Hence the necessity, in proportion as cultivation extended, of forming a railway system connecting the zones of production with the ports. The railways of the Pampa have not superseded existing roads; they have served for the exploitation of the new lands.

The Pampa has had the advantage of a large market for its produce (leather, wool, meat and cereals), always easily absorbed by a world-wide consumption. Its affairs show a relative stability. The Pampa knows scarcely anything of commercial crises; it only experiences credit crises: if the optimism and the confidence of the speculators are shaken, if any disturbance of the great money markets should be felt in Argentina, then the price of land vacillates; nevertheless work is not interrupted; the exporters are rarely idle; the statistics giving the extent of the cultivated area show no diminution.

ESTHONIA.

THE AGRARIAN REFORMS. -- BERNMANN (Oskar): *Die Agrarfrage in Estland*. Berlin, 1920. — SAPAS (J): *Progress of the Agrarian Reforms in Esthonia*. *Baltic Review*, Vol. I, No. 1, London, January 1921.

When, in the 13th century, the Knights of the Teutonic Order entered the territory which is now that of the Republic of Esthonia, they found that the Esthonian population settled there utilized the land in a very primitive manner. The inhabitants sought to procure cultivable land for themselves by clearing or by burning the forests which covered the greater part of the country. Under the dominion of these knights more rational methods of cultivating the soil were introduced into the country and at the same time a large part of the lands was divided amongst the great lords and given as fiefs to their vassals. In this way a series of feudal lordships was created, which comprised groups of villages inhabited by peasants and the residences of the lords themselves. Gradually the peasants became serfs attached to the land, and towards the end of the 15th century a state of servitude may be considered to have been definitely established.

The period of Swedish dominion led, under various aspects, to an improvement in the position of the peasantry, but the servitude remained unchanged. It was only abolished in 1816 under the Government of Alexander I by the Esthonian Diet. Personal liberty and freedom of movement were given back to the peasants. In order also to improve the material conditions of the peasants, the Esthonian Diet decided, about 1840, to detach a certain part of the estates of the lords and to assure to the peasants an irrevocable right to use it. The remainder, the domains of the lords, remained freely at the disposal of the owners. At the same time efforts were made to facilitate by suitable methods the transfer to the peasants of the ownership of the farms which they held on lease.

The following table shows in what measure this transformation had taken place up to the beginning of the War. It indicates the distribution of the land amongst the different classes of owners in Esthonia, exclusive, however, of the district of Petseri:

A. LARGE ESTATES.

Belonging to individual owners			Belonging to corporations		
Number	Total area in acres	Average area in acres	Number	Total area in acres	Average area in acres
734 manorial estates	3,791,718	5,165	8 belonging to nobility corporations . .	109,712	13,714
95 entailed estates	998,133	10,507	101 Crown estates . . .	861,945	8,534
61 small estates . .	76,456	1,286	12 belonging to agrarian banks	168,575	8,872
890	4,866,307		3 legacies and charitable endowments	20,477	6,825
			108 Church estates . . .	133,796	1,239
			18 town estates	102,376	5,688
			257	1,396,881	

Total area of large estates, 6,236,188 acres.

B. SMALL HOLDINGS.

Number	Total area in acres	Average area in acres
23,023 farms leased from owners of large estates	1,375,329	59.73
50,961 farms purchased by occupier.	4,349,614	84.76
73,984	5,724,943	

As may be seen from the table, large estates prevail in Esthonia. About 900 landlords possessed only a million acres less than 74,000 peasants, and the total area of the large estates held by individuals exceeded by half a million acres the small agricultural holdings.

In the autumn of 1918, a *Maandukohu* or National Council was placed at the head of the administration of Esthonia. This Council had been in existence since 1917 and in its sitting of 27 November 1918 it voted a new law on "the control of landed property and the provisional organization of agricultural relations."

By this law all the great landed property was placed under the control of the peasant administration of the communes. On 17 December 1918 another Order received the force of law. It enabled the Ministry of Agriculture to place under State administration all the agricultural holdings which were not cultivated on rational systems. A part of the lands so acquired was immediately divided and another part remained under the direction of land agents specially appointed for the purpose. As a rule these were appointed from amongst land agents who had been obliged to resign their positions.

On 25 April 1919, the Constituent Assembly nominated a Commission to study the general agrarian reforms to be carried out in the country. The proposals of the Commission were examined by the Constituent Assembly in three plenary sittings, were accepted in their broad lines and proclaimed as a State law on 10 October of the same year. The provisions of the law may be thus summarized:

1. The large estates of Esthonia, together with the live and dead stock thereon, become the property of the State. Exception is made of the town estates, estates belonging to benevolent and scientific institutions, etc. The same procedure is applied to parish property, except that in this case the stock is excluded (§§ 1, 2).

2. The amount of compensation payable for the land, as well as the determination of the classes of land to be expropriated without compensation, will be dealt with in a special law. For the determination of the compensation payable for the live stock, the market prices of 1914 will be taken as a basis. The compensation for dead stock will be payable on the basis of the prices of the articles at the time they were bought. If the articles are depreciated the price will be reduced accordingly. (§§ 10, 11, 12).

3. The State farms will be let out: (a) to small cultivators in hereditary tenancy; (b) for long periods to educational institutions, to autonomous institutions, to co-operative societies, to commercial and industrial undertak-

ings, as well as to *artels* for collective farming ; for short periods to individuals. The State may also retain farms under its own management (§ 15). The district administration determines, on the proposal of the communal council, the order in which the land is to be let out to small cultivators. Those who will have the prior right to the land will be (1) citizens who have given proof of conspicuous valour at the front during the War for the liberation of Esthonia ; (2) citizens who have been wounded during the war of independence ; (3) the families of soldiers who fell in the war of independence ; (4) soldiers who have taken part in the operations against the enemy according to length of service (§§ 20, 21). The State will help the poorest cultivators in constructing the necessary buildings, in buying stock and in making improvements, by giving them loans for long periods repayable by instalments. Permanent improvements affecting the land itself will be carried out at the expense of the State or of the autonomous administrations (§ 24). The forests on the expropriated estates will not be divided, but will remain the property of the State (§ 23).

4. An Agrarian Bank will be established to carry out all the financial operations connected with the agrarian reforms and the new utilization of the land.

On 28 January 1920, regulations were issued for carrying out the Agrarian Law which, besides general rules for the management of the lands which become the property of the State, contains also a series of purely technical rules. The reforms are to be completely carried out in three or at most four years.

FRANCE.

THE PRESENT CONDITION OF THE SUBDIVISION OF LAND. — GIRAULT (Arthur);
Le morcellement parcellaire en France, in *Revue d'Economie Politique*, Paris, September-October 1920.

M. Arthur Girault, professor of political economy at the University of Poitiers, after studying the condition of more than 200 communes belonging to different districts, the cadastral survey of which has been or is being remade, decides that two great causes of subdivision are without danger from an agricultural point of view. These are :

(1) The extension of means of communication, and especially the construction of railways, which alone has occasioned, in the course of the last sixty years, the formation in France of many millions of plots ;

(2) The development of city life, and the increase of population resulting in the construction of new buildings.

In order to appreciate justly the condition of the subdivision of the country, it would be necessary to set aside the new subdivisions occasioned by the two classes of causes indicated. It would be desirable to bear in mind only the increase and diminution occurring in country districts in consequence of legal or material alterations attributable to the proprietors. These alone are important from the point of view of agricultural

economy. Now in this respect, M. Girault considers that where the number of plots exceeds the average (2.4 per hectare) and especially in the north-east of France (Lorraine, Burgundy and Champagne) the tendency to diminution prevails. In districts where excessive subdivision constitutes an evil really injurious to the proprietors, they are naturally seeking a remedy.

The communes where subdivision is increasing (and it does not appear that these are the most numerous) are more frequent where the number of small plots is below the average. But in these communes, subdivision is not a danger; it coincides on the contrary, with a more complete and intensive cultivation of the soil.

Hence there is a general tendency, very imperfect however, to an equalization of the number of plots, which diminishes where it is too great, and increases where it is insufficient. This general tendency may nevertheless come into conflict with other forces acting in a contrary sense, the principal of which is the modification of the nature of the crops. The various crops have not all the same requirements. In particular, where the vine is largely cultivated subdivision increases, diminishing on the contrary where vineyards are few. The same thing may be said of market-gardening. On the other hand the extension of stock farming coincides with a diminution of subdivision. Thus must be so in the nature of things.

On the whole, the evil is not increasing, but rather diminishing.

MEXICO.

THE CULTIVATION OF UNCULTIVATED LAND DECLARED TO BE A WORK OF PUBLIC UTILITY. — *Diario Oficial*, No. 43, Mexico, 28 June 1920.

On 25 June 1920, a decree was published declaring the cultivation of uncultivated land capable of being put to agricultural use to be a work of public utility. If such lands have been neglected by their legitimate owners or occupiers the nation may at any time dispose of them, in order that they may be utilized for agricultural purposes.

The decree fixes a limit within which the lands must be sown, providing that lands not cultivated by their holders or owners within that limit and not in fallow shall remain at the disposal of the municipal councils. Among these are comprised also lands previously sown annually with any crop during the rainy season, or with a system of irrigation, etc., and those which neighbouring proprietors shall declare to be capable of cultivation during the rainy season, except pastures, lands where perennials are grown, and woods that must be preserved according to the laws in force.

The councils may dispose of such lands, but only to let them on a produce-sharing or other system to those who may make application for them, giving the preference to agriculturists of the neighbourhood.

It was laid down that within a month from the promulgation of the law, taking into account local customs, climate, various kinds of cultivation, etc., a limit of time should be fixed in every region, within which owners and occupiers would be obliged to prepare and to sow the land.

This limit, which varies according to the region, may be extended at the request of the proprietors, for once only, with the consent of the respective councils, provided that for such extension there are special reasons, which must be published by the councils.

Agriculturists of the neighbourhood, or any other persons have a right to apply to the proper council for those waste lands which they intend to cultivate, making the application according to special rules laid down by the decree.

Should the application be refused without sufficient reason the applicant has a right to submit it to the local judge for an oral summary judgement, which must result in a decision pronounced even on a basis of mere presumption, before the time of harvest.

Should the judgement be favourable to the applicant, he who is responsible for the refusal must pay an indemnity equivalent to half the value of the crop.

The permission to cultivate the land will be personal and cannot be transferred to other persons.

The conditions of the produce-sharing or other tenancy of the lands is to be fixed by the councils when the term of the agreement does not exceed the agricultural year.

As regards lands which have never been cultivated, or had been uncultivated for four years preceding the date of the decree, the term of the tenancy, produce-sharing or other, must not exceed three years.

The cultivator must pay to the proper council a quota not exceeding 10 per cent. of the crop if he has been supplied with requisites for labour, and 5 per cent, if he has had nothing but the land.

If this had been previously left fallow by the owner he shall receive 3 per cent. of the crop, to be paid by the council out of the quota due to it.

The owner who has given up the land may, if he so desire, bring proof to show that he has not abandoned it. If necessary he may appeal in writing to the local judge for a summary judgement and a decision to be pronounced, at latest, the day before the harvest begins. Should the sentence be favourable to him the whole rent will be paid to him. But should the council have supplied the tenant with farming requisites, the sum will be divided between the proprietor and the council.

For those lands which have never been cultivated, and those not cultivated during the four years preceding the date of the publication of the decree in question, no payment will be due from those who cultivate it, during the time in which they are temporarily in possession.

The amount of land which the councils may grant for cultivation shall not exceed 20 hectares in the Federal District, nor 100 hectares in Lower California and in the Territory of Quintana Roo. In other regions the amount will be determined by the local authorities. The rents and the sums due from the cultivators for lands granted on the produce-sharing system shall go to increase the funds of the councils.

The occupation by the councils of uncultivated irrigated lands gives

them a right to the waters, which, according to civil law and local custom, have been utilized in previous years.

The lands to which the present decree refers shall continue to be considered for legal purposes as the property of their respective owners. But the municipality will be the legal occupier of the land by a temporary title for the legal agricultural period, but only for the purposes of the decree, since after the last crop gathered in during the period of the letting agreement, the land will return to its legitimate owners.

SWEDEN.

LARGE AND SMALL HOLDINGS IN JUNE 1917. — STATISTIK ÅRSBOK FÖR SVERIGE (*Statistical Year Book for Sweden*), Year 1920 Stockholm, 1920.

On June 1917 there were in Sweden 447,695 agricultural holdings, divided as follows :

Between	0.26 hectare and	1 hectare	. . . . .	63,605
"	1.01 hectares and	2 hectares	. . . . .	67,247
"	2.01 " "	3 "	. . . . .	47,739
"	3.01 " "	5 "	. . . . .	70,230
"	5.01 " "	10 "	. . . . .	95,752
"	10.01 " "	20 "	. . . . .	64,358
"	20.01 " "	30 "	. . . . .	18,849
"	30.01 " "	40 "	. . . . .	7,860
"	40.01 " "	50 "	. . . . .	4,051
"	50.01 " "	100 "	. . . . .	5,414
"	100.01 " "	200 "	. . . . .	1,993
More than 200 hectares	. . . . .			507

As will be seen the largest class is that of holdings between 5.01 hectares and 10 hectares, which numbers 95,752 ; then come, following fairly closely, the holdings of from 3.01 hectares to 5 hectares, numbering 70,230 ; the holdings of 1.01 hectares to 5 hectares, numbering 67,247 ; the holdings of 10.01 hectares to 20 hectares, numbering 64,358 ; the very small holdings of 0.06 hectare to 1 hectare, numbering 63,605. There were only 19,825 holdings of more than 30 hectares and of these only 2,500 were of more than 100 hectares.

III. — MISCELLANEOUS QUESTIONS

INFORMATION RELATING TO MISCELLANEOUS QUESTIONS.

GUATEMALA.

1. THE FUNCTIONS OF THE NEW MINISTRY OF AGRICULTURE. — *El Guatemalteco (Diario Oficial)*. Guatemala, 4 October, 1920.

By Decree No. 760, dated 2 October 1920, the functions of the new Ministry of Agriculture of the Republic of Guatemala were defined.

They may be thus summarized: enquiry into the laws and provisions to be adopted to secure a wider development of agriculture and the industries connected with it; dissemination among agriculturists of ideas which may contribute to the perfecting of agriculture, stock-farming and the derived industries; the purchase and distribution of seeds and plants, and the purchase of animal useful in farm work or for the improvement of the breeds.

The new Ministry is also to institute competitions among agriculturists, organize new experiment stations and laboratories for agricultural chemistry; secure the protection of woods; promote investigations and scientific inquiries into the diseases of cattle, of plants, etc.

The decree invests the new Ministry with ample authority as to immigration and colonization, also as to sanitary regulations respecting the importation and exportation of animals, seeds and plants, and as to regulations affecting agricultural labour throughout the Republic.

Agricultural committees, chambers of agriculture, associations and co-operative agricultural societies will be subject to the new Ministry, which will also have the duty of preparing laws respecting agricultural credit.

The compilation of agricultural statistics, with data as to production, consumption and importation of agricultural produce and cattle, will also be the duty of the new Ministry. The Office of Agriculture and all other offices which by the decree it is empowered to institute, such as that of Land and Colonization, etc., will also be under its authority.

* * *

2. THE ENCOURAGEMENT OF STOCK FARMING. — *El Guatemalteco (Diario Oficial)*. Guatemala, 4 October, 1920.

In order to encourage stock farming, which may prove very lucrative in the Republic of Guatemala, the Government on 2 October 1920 adopted certain provisions with regard to the importation and exportation of cattle.

To encourage the importation of animals for breeding purposes, the

Government undertakes to reimburse the expense incurred for the conveyance of such animals from the landing place to their destination in the country.

Exportation is permitted only for male animals, and for every head exported the Government will pay 2 pesos (gold) to reimburse the expense. The exportation of female animals is absolutely prohibited.

NORWAY.

CAPITAL, INCOME AND COMMUNAL TAXES IN RURAL COMMUNES IN 1918. — STATISTISK AARBOOK FOR KONGERIKET NORGE (*Annuaire Statistique de la Norvège*). Year 1919. Christiania, 1920.

Capital and income have increased considerably during recent years in the rural communes of Norway and the following table indicates the increases as well as the communal taxes which fall upon the rural population.

	Year				
	1913-14	1914-15	1915-16	1916-17	1917-18
	CROWNS	CROWNS	CROWNS	CROWNS	CROWNS
Estimated capital per inhabitant . .	1,399	1,504	1,568	1,770	2,274
Estimated income per inhabitant . .	240	263	277	331	485
Communal taxes per inhabitant . . .	15.11	16.61	17.40	20.93	30.96
Communal taxes per taxpayer . . .	46.36	49.60	51.23	61.30	89.59
Communal taxes per 1000 crowns of estimated capital	1.08	1.10	1.11	1.18	1.36
Communal taxes per 100 crowns of estimated income	6.29	11.61	11.39	10.41	9.41

As will be seen, the capital and income per inhabitant have greatly increased between 1913-14 and 1917-18, but the former shows a smaller proportionate increase than the latter, which has almost doubled. As to the communal taxes, the amount per inhabitant has more than doubled and the increase of the amount per taxpayer is hardly less. But, in view of the increase of the general wealth, the burden on capital and on revenue has only increased in the proportions of 20 % and 50 % respectively.

PORTUGAL.

THE INSTITUTION OF AN AGRICULTURAL DEVELOPMENT FUND. — *Boletim da Associação Central dos Agricultores Portugueses*. Vol. XXI, December 1920. Lisbon.

To facilitate the carrying out of various provisions adopted and to be adopted by the Portuguese government for the improvement of agriculture, a special fund called the Agricultural Development Fund (*Fundo de Fomento Agrícola*), to which reference has already been made, was set apart by Decree No. 6: 962, 23 September 1920.

This fund is formed from various sums, paid as fines and special taxes, and also from an annual payment to be entered in the budget of the Ministry of Agriculture, which for the current agricultural year is fixed at \$ 500,000.

This sum will be placed in the General Deposit Bank, so that payments may be effected by means of cheques signed by two members of the Agriculture Development Board (*Junta de Fomento Agrícola*). The income of the Agricultural Development Fund will be devoted especially to the necessary expenses for cultivation adapted to the nature of the soil and the various topographic conditions of different regions, to the encouragement of research, and to the construction of private irrigation works, to the promotion of lectures and practical experiments for the extension of knowledge of the best agricultural processes, to the granting of prizes for the encouragement of agriculturists and the increase of agricultural publications; to assist propaganda for all the measures for agricultural improvement adopted by the government, and for the means of carrying them out.

The fund will be administered by the Agricultural Development Board which will be composed of the Director General of the Department of Agriculture, the Director General of the Department of Physiography, and a representative of the Central Association of Agriculture.

The Agricultural Development Board has administrative autonomy for the management of the fund in question. It is a recognized corporate body and is authorized to purchase, exclusively in the interests of agriculture, real property, whether subject to charges or not, and whether rural or urban, which may be alienated, let or granted in emphyteusis.

The sums received for land sold, as well as rents and dues received, will go to increase the Agricultural Development Fund.

SPAIN.

THE SYSTEM OF PURCHASE AND DISTRIBUTION OF GRAIN AND FLOUR. — *Gaceta de Madrid*, Nos 210 and 252, 28 July and 8 September 1920; *Revista Social y Agraria*, No. 16, August 1920.

The insufficiency of available home-grown grain caused anxiety to the Government of Spain at the beginning of the agricultural season of last year, and in order to guarantee the citizens against loss resulting from the speculation of producers and merchants, already manifesting itself, the Royal Decree of 27 July 1920 was promulgated.

This decree enjoined agriculturists to send to the Provincial Food Supply Committees, through the municipal authorities, a sworn declaration as to the amount of grain harvested, the extent of land cultivated, and the quantity of seed and chemical manures required for future sowing. Agriculturists in districts where the production exceeded local consumption were to sell, at the price of 56 pesetas per quintal, all their surplus

to the nearest millers, and the millers were to keep the flour at the disposal of the State, which alone could give permission to sell it. Mills on the frontiers were authorized to purchase corn from the adjoining countries, the State intervening in drawing up the contract, to reimburse the higher price that must be paid. In districts of large consumption stores were established to gather supplies of milling grain whether foreign or home-grown.

But after the publication of this decree of which we have given a general outline, the Spanish farmers were unanimous in petitioning for a return to free trade in grain. After a more rigorous inquiry into the food supply it appeared that the quantity of grain in Spain, especially after the very considerable purchases made in foreign countries by the Treasury, was more than sufficient for the necessities of national consumption, and therefore there was no danger of a great increase in the price of bread. The Government, therefore, by a Royal Decree dated 7 September 1920 decided to return to free trade in grain. But to avoid an artificial increase in the price of flour, or its adulteration, or illegal sale, or contraband exportation, State intervention continued in the flour mills, and it was enacted that flour should not be sold at a higher rate than 82 pesetas per quintal, net weight, including carriage, on pain of requisition of the factories.

Lastly the State placed at the disposal of the agriculturists at a low price, but preferably to syndicates and agricultural federations, all the superphosphates already purchased abroad.

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THE INTERNATIONAL INSTITUTE OF AGRICULTURE

ORIGIN OF THE INSTITUTE AND SUMMARY OF THE INTERNATIONAL TREATY.

The International Institute of Agriculture was established under the International Treaty of 7 June 1905, which was ratified by forty governments. Nineteen other governments have since adhered to the Institute.

It is a Government institution in which each country is represented by delegates. The Institute is composed of a General Assembly and a Permanent Committee.

The Institute, always confining its attention to the international aspect of the various questions concerned, shall :

(a) collect, study and publish as promptly as possible, statistical, technical, or economic information concerning farming, vegetable and animal products, trade in agricultural produce, and the prices prevailing in the various markets ;

(b) communicate the above information as soon as possible to those interested ;

(c) indicate the wages paid for farm work ;

(d) record new diseases of plants which may appear in any part of the world, showing the regions infected, the progress of the diseases, and if possible, any effective remedies ;

(e) study questions concerning agricultural co-operation, insurance and credit from every point of view ; collect and publish information which might prove of value in the various countries for the organization of agricultural co-operation, insurance and credit ;

(f) submit for the approval of the various governments, if necessary, measures for the protection of the common interests of farmers and for the improvement of their condition, utilizing for this purpose all available sources of information, such as resolutions passed by international or other agricultural congresses and societies, or by scientific and learned bodies, etc.

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PRINCIPAL WEIGHTS, MEASURES AND MONEY OF THE VARIOUS COUNTRIES AND THEIR BRITISH EQUIVALENTS

1 Cadastra, arpent (Hungary)	=	1.42201	acres
1 Centimetre	=	0.393715	inches
1 Cho (60 ken) (Japan)	=	119.30327	yards
1 Crown (100 heller) (Austria-Hungary)	=	10 d.	at par
1 Crown (100 ore) (Denmark, Norway, Sweden)	=	15.1 ¹ / ₈ d.	at par
1 Deciatine (2 tcherwert, (Russia)	=	2.69966	acres
1 Dinar, gold (100 para) (Serbia)	=	933/64 d.	at par
1 Dollar, gold (\$) (100 cents) (United States)	=	48.5 ⁵ / ₁₆ d.	at par
1 Drachm, gold (100 lepta) (Greece)	=	933/64 d.	at par
1 Egyptian Kantar	=	99.0498	lbs.
1 Feddan Masri (24 Kirat Kame) (Egypt,	=	1.03805	acres
1 Florin, gold, or Gulden (100 cents) (Netherlands)	=	18.753/64 d.	at par
1 Franc (100 centimes) (France)	=	933/64 d.	at par
1 Gramme	=	0.03527	oz.
1 Hectare	=	2.47109	acres
1 Kilogramme	=	2.2	lbs.
1 Kilometre	=	1093.613	yards
1 Kokou (10 To) (Japan)	=	1.58726	quarts
1 Lei, gold (100 banil) (Rumania)	=	933/64 d.	at par
1 Leu (100 stotinki) (Bulgaria)	=	933/64 d.	at par
1 Lira (100 centesimi) (Italy)	=	933/64 d.	at par
1 Litre	=	0.21998	gallons
1 Mark (100 Pfennige) (Germany)	=	0.0275	bushels
1 Mark (100 penni) (Finland)	=	11 ³ / ₄ d.	at par
1 Metre	=	933/64 d.	at par
1 Mikreis, gold (Brazil)	=	3.28084	feet
1 Milreis, gold (Portugal)	=	28. ²⁶¹ / ₆₄ d.	at par
1 Peseta, gold (100 centimos) (Spain)	=	48. ⁵¹⁹ / ₆₄ d.	at par
1 Peso, gold (100 centavos) (Argentina)	=	933/64 d.	at par
1 Pound, Turkish, gold (100 piastre) (Ottoman Empire)	=	38.1137/64 d.	at par
1 Pund (Sweden)	=	188.015/64 d.	at par
1 Quintal	=	0.93712	lbs.
1 Rouble, gold (100 kopeks) (Russia)	=	1.96843	cwtls.
1 Rupee, (16 annas) (British India)	=	28.1 ³ / ₈ d.	at par
1 Talari (20 piastre) (Egypt)	=	¹ / ₁₀	of £1 (gold)
1 Verst (Russia)	=	48.111/32 d.	at par
1 Yen, gold (2 fun or 100 sen) (Japan)	=	1166.64479	yards
1 Zentner (Germany)	=	28.037/64 d.	at par
	=	110.23171	lbs.

INTERNATIONAL INSTITUTE OF AGRICULTURE
BUREAU OF ECONOMIC AND SOCIAL INTELLIGENCE

INTERNATIONAL REVIEW
OF AGRICULTURAL ECONOMICS

(MONTHLY BULLETIN
OF ECONOMIC AND SOCIAL INTELLIGENCE)

Part I: Co-operation and Association

GERMANY.

THE AGRICULTURAL CO-OPERATIVE MOVEMENT IN 1918-19

SOURCE:

JAHRBUCH DES REICHSVERBANDS DER DEUTSCHEN LANDWIRTSCHAFTLICHEN GENOSSENSCHAFTEN FÜR 1919 26th Year Berlin 1920

In a series of articles which appeared in recent issues we described the agricultural co-operative movement during the war, up to 1 June 1918. The year from that date to 1 June 1919 was marked by events of such importance that from the co-operative point of view it is of special interest. The development of co-operation within the general framework of events will be shown in the following paragraphs.

§ 1. GENERAL DEVELOPMENT OF AGRICULTURAL CO-OPERATION

The year in question may be divided into three periods, according to the possibilities of development it presented to agricultural co-operation. The first, from June to November 1918, closes the long period of war. The development of co-operation, though hindered by the economic conditions resulting from the war, yet proceeded rather more rapidly than in the years previous to the war. In the second period, from the cessation of hostilities to the beginning of 1919, there were radical social and economic changes. The formation of new agricultural societies at once received a sharp setback. In January 1919 began the third period, in which with the gradual removal of the economic restrictions and the return of co-operators to their normal co-operative activity, and also through

another, and not the most insignificant factor, the tendency to socialization showing itself everywhere in economic life, the development of co-operation received a new and powerful impulse. The following figures show this development from month to month:

Month		Societies formed	Societies dissolved	Net increase
June	1918	106	19	87
July	"	119	21	98
August	"	99	19	80
September	"	81	16	65
October	"	105	28	77
November	"	93	19	74
December	"	60	16	44
January	1919	101	21	80
February	"	127	20	107
March	"	176	38	138
April	"	251	47	204
May	"	262	23	239
Year	1918-1919	1,580	287	1,293

The average number of newly formed societies in the first six months, from June to November was about 100; in December it diminished to 60; in January there was again a considerable increase. In the month of May alone nearly as many co-operative societies were formed as in the whole war year 1915-16 — 262 as compared with 316.

The increase in the number of agricultural co-operative societies in the year under review was 1,293. To find a similar extraordinary increase we must go back to the year 1900-01, when it was 1,397. Comparing this with the years of the war and the last year of peace we have the following rate of progress;

Year	Increase
1913-14	1,126
1914-15	237
1915-16	197
1916-17	330
1917-18	527
1918-19	1,293

The total increase of agricultural co-operative societies in the four years of the war 1914-18 is thus 1,291, the same as that reached in the single year 1918-19. Of the whole number of co-operative societies registered in Germany on 1 June 1919, which amounted to 39,700, nearly four-

fifths, that is, 30,770, were agricultural co-operative societies. In this number are included the co-operative societies in the territories to be detached from Germany, the number of which was not subtracted from the total as they could not in all cases be ascertained.

The division of the agricultural co-operative societies among the different states and provinces of Germany, according to the different forms of liability adopted by the respective societies, is shown in Table I (page 168).

From this table it will be seen that nearly half of all the agricultural co-operative societies, numbering 16,992, belong to Prussia. Bavaria follows with 5,802 societies, Württemberg with 1,896, Baden with 1,716, etc. The numbers show a diminution which becomes more and more rapid until finally Schaumburg-Lippe and Bremen are reached, with 10 and 9 respectively. The same table shows that apart from the societies based upon the liability to make unlimited supplementary payments, of which there are only 112, the great majority, that is, 22,058, more than two thirds of the total, work on the basis of unlimited liability, while limited liability is adopted by 8,675 societies. In Pomerania, Saxony, Westphalia, Anhalt, Hamburg and Bremen the latter form is more general than the former. In the years of war, and for some time previous, both forms of liability showed an uninterrupted development considered absolutely, but relatively, especially in the last year limited liability prevailed, as shown by Table II. (page 169)

It may be deduced from Table II that while the proportion of societies with liability to make unlimited supplementary payments remains unchanged, that of societies with unlimited liability is continually decreasing, and to the same extent the proportion of societies with limited liability is increasing. The reason is that among co-operative societies for purchase and sale, co-operative dairy societies, and particularly miscellaneous co-operative societies (more especially the societies for the supply of electricity), the form of limited liability is more widely extended. Also, in the year under review, many agricultural credit societies, which, except in the federations of Stettin and Halle, almost exclusively adopted the form of unlimited liability, have now made a change. This must be attributed among other causes to the uncertainty of the economic situation in general, and to the danger of a serious fall in the value of war loans, in which the agricultural co-operative societies had invested more than 4,000 millions of marks (1).

The number of members belonging to all the German agricultural co-operative societies is calculated at 2.9 millions in round numbers; taking the members of their families also into account it would be in all 1.4 millions of inhabitants, that is, about half the independent agriculturists of Germany. In relation to the whole population, there was in 1919 an agricultural co-operative society for every 2,158 persons, and in 1918 a co-operative society for every 2,192. Confining ourselves to those ter-

(1) See "Agricultural Co-operative Societies During the War" in our issue of August 1920.

TABLE I. — *Distribution of Agricultural Co-operative Societies according to the Form of Liability in the Different Territories on 1 June 1919.*

States or provinces	Number of co-operative societies			Total
	with unlimited liability	with limited liability	with liability to make unlimited supplementary payments	
<i>Prussia:</i>				
East Prussia	515	113	5	633
West Prussia	406	133	1	540
Brandenburg	955	397	32	1,384
Pomerania	295	1,420	2	1,717
Posen	675	348	3	1,026
Silesia	1,931	794	2	2,727
Saxony	157	1,203	15	1,375
Schleswig-Holstein	900	109	7	1,016
Hanover	1,219	549	24	1,792
Westphalia	565	528	5	1,098
Hesse-Nassau	1,112	169	2	1,283
Rhine Province	1,866	464	2	2,332
Hohenzollern	57	12	—	69
Total Prussia	10,653	6,239	100	16,992
<i>Bavaria:</i>				
Right bank of Rhine	4,484	539	2	5,025
Left bank of Rhine (Palatinate)	733	44	—	777
Total Bavaria	5,217	583	2	5,802
Saxony	341	194	2	537
Württemberg	1,757	130	—	1,896
Baden	1,004	711	1	1,716
Hesse	705	209	—	914
Mecklenburg-Schwerin	462	71	2	535
Mecklenburg-Strelitz	41	18	1	60
Saxe-Weimar-Eisenach	168	40	—	208
Oldenburg	316	116	—	432
Brunswick	189	103	4	296
Saxe-Meiningen	111	25	—	136
Saxe-Altenburg	57	15	—	72
Saxe-Coburg-Gotha	87	39	—	126
Anhalt	7	55	—	62
Schwarzburg-Sondershausen	34	6	—	40
Schwarzburg-Rudolstadt	34	22	—	56
Waldeck	53	13	—	66
Reuss (Elder Branch)	15	1	—	16
Reuss (Younger Branch)	31	4	—	35
Schaumburg-Lippe	6	4	—	10
Lippe	21	14	—	35
Lübeck	6	5	—	11
Bremen	4	5	—	9
Hamburg	6	14	—	20
Alsace-Lorraine	733	30	—	763
Total Germany	22,058	8,675	112	30,845
German colonies	1	6	—	7
Foreign (Palestine)	—	3	—	3

TABLE II. — *The Different Forms of Liability in the Last Six Years, Shown Absolutely and Relatively.*

Year	Societies with unlimited liability		Societies with unlimited liability		Societies with liability to make unlimited supplementary payments	
	Number	Percentage	Number	Percentage	Number	Percentage
1914	21,049	74.3	7,156	25.3	113	0.4
1915	21,109	73.9	7,333	25.7	113	0.4
1916	21,226	73.8	7,414	25.8	112	0.4
1917	21,320	73.3	7,619	26.3	113	0.4
1918	21,539	72.9	7,900	26.7	113	0.4
1919	22,058	71.5	8,675	28.1	112	0.4

ritories where the population is predominantly rural, the proportion was one agricultural co-operative society for every 1,410 inhabitants in 1919, and for every 1,433 in 1918. In these districts agricultural co-operation has naturally penetrated further. The proportion between the number of co-operative societies and the agricultural area remains almost the same as in 1918; the Palatinate is far ahead of the other states with a co-operative society for every 427 hectares, while East Prussia, where large estates are numerous, comes last with a co-operative society for every 4,264 hectares.

§ 2. THE FEDERATIONS OF AGRICULTURAL CO-OPERATIVE SOCIETIES.

Of the 30,845 agricultural co-operative societies registered on 1 June 1919, 29,253, that is, 94.8 per cent were grouped in federations, as compared with 27,587, or 93.2 per cent, in the preceding year. The increase is principally owing, as in previous years, to the fact that the new societies were formed on the initiative of the federations. Of the whole number of co-operative societies 20,729 belonged to the National Federation as compared with 19,441 in the preceding year, so that this organization takes by far the highest place among the federations. The 33 state and provincial federations grouped round the National Federation were all federations for supervision according to the German legislation on co-operative societies, with the four following exceptions: (1) *Landesverband der landwirtschaftlichen Kreisvereine* in Alsace-Lorraine; (2) *Deutsch-Südwestafrikanischer Genossenschaftsverband* in Windhuk; (3) *Verband der baltischen Genossenschaften* in Mitau, and (4) *Verband der deutschen Genossenschaften in Polen*, in Lodz. Besides the National Federation, the following federations of agricultural co-operative societies with their affiliated societies were in existence on 1 June 1919:

(1) *Generalverband der deutschen Raiffeisengenossenschaften* of Berlin with 16 federations and 6,538 co-operative societies, as compared with 15 federations and 6,010 societies in the preceding year.

(2) *Landwirtschaftlicher Revisionsverband des Bayerischen Bauernvereins* of Ratisbon, with 805 co-operative societies, as compared with 760 in the preceding year.

(3) *Genossenschaftsverband des Badischen Bauernvereins* of Friburg, with 453 co-operative societies, as compared with 418 in the preceding year.

(4) *Revisionsverband des Bundes der Landwirte* of Berlin, with 445 co-operative societies, as compared with 396 in the preceding year.

(5) *Bayerischer Genossenschaftsverband* Aurbach of Aurbach, with 266 co-operative societies, as compared with 265 in the preceding year.

(6) *Mciereivcrband für West-Holstein* of Hohenstedt, with 130 co-operative societies as compared with 133 in the preceding year.

(7) *Mittelrheinischer Genossenschaftsverband* of Coblenz, with 70 co-operative societies, as compared with 22 in the preceding year.

(8) *Molkerei-Revisionsverband für die Provinzen Brandenburg, Pommern, Sachsen, und die Grossherzogtümer Mecklenburg* of Prenzlau, with 64 co-operative societies, as compared with 66 in the preceding year.

(9) *Verband von Erwerbs- und Wirtschafts-genossenschaften der Provinz Oberhessen* of Giessen, with 40 co-operative societies, as in the preceding year.

(10) *Verband landwirtschaftlicher Genossenschaften in Regierungsbezirke Hildesheim*, with 31 co-operative societies, as in the preceding year.

(11) *Verband ostpreussischer Genossenschaften* of Königsberg with 17 co-operative societies, as in the preceding year.

(12) *Molkerei-Revisions verband für das Fürstentum Ratzeburg*, with 5 co-operative societies as in the preceding year.

The 11 minor federations (Nos. 2 to 12) comprise in all 2,326 agricultural co-operative societies, a number slightly less than one third of the societies affiliated to the *Raiffeisenverband* (No. 1) which in its turn with 6,538 co-operative societies had about one third of the number of the affiliated societies of the *Reichsverband*.

§ 3. AGRICULTURAL CREDIT SOCIETIES.

Numerical increase. — The year under review as also the preceding war years was characterized by a great influx of money into the agricultural credit societies. The available capital, not succeeding in finding an investment in agricultural undertakings, because of the want of building materials, fertilizers and concentrated feeding stuffs, and also because of the increased cost of labour, was deposited in the agricultural credit societies, for which this was a good opportunity for development. Nearly half the total numerical increase (1,293) of the agricultural co-operative societies in the year under review belongs to this category of so-

cieties, which shows an increase of 605 thus divided among the separate months :

Month	Societies formed	Societies dissolved	Net increase
June 1918	61	4	57
July "	43	3	40
August "	42	3	39
September "	30		50
October "	36	6	30
November "	28	3	25
December "	16	3	13
January 1919	28	6	22
February "	60	1	59
March "	65	4	61
April "	128	7	121
May "	110	2	108
Year 1918-19	647	42	605

The net increase thus shows at first a growing diminution, reaching its lowest point in the month of December, with 13 agricultural credit societies, but from the month of January an ascending movement is perceptible and in April the net increase reaches 121, to fall again in May, the last month, to 108.

Out of a total of 30,845 agricultural co-operative societies, the number of credit societies was 18,788 on 1 June 1919, of which 9,703 belonged to Prussia, 4,354 to Bavaria, 1,378 to Württemberg, 722 to Alsace-Lorraine, 574 to Baden, and so on, diminishing to only 2 in Schaumburg-Lippe.

Of these, 17,249 credit societies, or 91.8 per cent. of the whole, were based on unlimited liability; 1,518, or 8.1 per cent. preferred limited liability, and only 21, or 1 per cent. chose liability to make unlimited supplementary payments. It is therefore evident that among agricultural credit societies the form of unlimited liability prevails. But in the year under review the tendency was manifested in various places to adopt more widely the form of limited liability. We have already pointed out the causes of this fact.

Of the 18,788 credit societies, 12,480 or two thirds belonged to the National Federation. The number of co-operative societies which furnished returns was 11,164 as compared with 11,320 in the preceding year. It should here be observed that the banks belonging to the Federation of Posen I (*Verband landwirtschaftlicher Genossenschaften für die Provinz Posen*), which comprises 314 banks, are not included in the above statistics, because of special circumstances connected with them in consequence

of the carrying out of the treaty of peace. To the 11,164 societies which furnished returns belong in all 1,099,842 members, as compared with 1,104,032 for 11,320 credit societies in the preceding year. The average number of members per society is now 99 as compared with 98 in 1918.

Liabilities of the Credit Societies. — The liabilities of the credit societies, that is, their working capital, show a considerable increase on the preceding year both for the whole country and for single federations.

Table III (pages 174 and 175) indicates the amount of owned and borrowed working capital for the various federations, both absolutely and relatively.

It will be seen from Table III the share capital is highest in the Federation of Baden II, being 6,489,543 marks; then in diminishing order come Württemberg with 3,714,835 marks, Saxony with 3,653,733 marks, etc. In Baden I the amount of share capital is lowest, being only 29,932 marks. The largest reserve funds are in the Federations of Westphalia, 10,276,653 marks, Hanover 8,190,924 marks, and Württemberg 6,398,491 marks. The lowest reserve fund is that of Baden I, 19,407 marks. The total owned capital is highest in Baden II being 11,639,287 marks, or 6.3 per cent. of the total liabilities of this federation, and lowest in Baden I, being 49,392 marks, equal to 2 per cent. of its liabilities. In comparison with the borrowed capital, both the share capital and the reserve funds are therefore very modest: the owned capital for all Germany, 136,721,399 marks, is only 3 per cent. of the total working capital. For the borrowed capital the figures are very different; Westphalia has more than 500 millions of savings deposits, 516,383,777 marks; Hanover has 296,448,940 marks; Baden comes last, with 1,637,234 marks. For all the German federations the total amount of savings deposits reaches the immense sum of 3,584,161,611 marks, as compared with 2,670,379,893 marks in the previous year, an increase of nearly 1,000 million marks.

The influx of savings deposits was thus very great, partly owing to the increasing depreciation of the currency and the abundance of money. The same is true also with regard to deposits on current account, which rose from 616,352,057 marks in 1918 to 833,303,677 marks in 1919. It was otherwise with respect to the sums borrowed by the credit societies from the central banks. These were continually diminishing during the years of war since the agricultural credit banks, having sufficient working capital, did not need to have recourse to the aid of the central banks. In 1914 the loans outstanding still represented 135 millions of marks, reduced in 1915 to 115 millions in 1916 to 82 millions, in 1917 to 60 millions, in 1918 to 34 millions, and lastly, in the year in question, to 17,541,912 marks. The total borrowed working capital amounts to 4,494,536,057 marks, that is, 97 per cent. of all the liabilities. The owned and the borrowed capital were respectively 3.6 per cent. and 96.4 per cent. of the total capital in 1918; the ratio between them therefore continued to diminish in 1919 as it had done in the war years. The importance of this fact, and its consequences with regard to the

agricultural co-operative credit societies, have been pointed out in our issue of September 1920 in connection with the subject of the position of the agricultural co-operative credit societies during the war period.

The Assets. — The chief item of the assets, that is of the employment of the working capital, is formed by the sums deposited by the credit societies in the central banks. We have seen that there is a continual reduction of the debts of the agricultural credit societies to the central banks; there is at the same time a constant increase of deposits, which in the year under review reached the enormous sum of 1,929,553,015 marks, or nearly 2,000 millions, as compared with 1,600 million marks in 1918. The working capital therefore flows principally into the central banks, as centres of compensation.

The credit granted to members in the form of loans on current accounts amounted to 575,378,455 marks as compared with 555,539,951 marks in 1918, being an increase in round numbers of 20 millions of marks. The loans for fixed periods diminished from 1,073,620,078 marks in 1918 to 1,050,562,458 marks in 1919, being less by about 23 millions of marks. The temporarily diminished demand for credit among the rural population is evidently connected with these facts. The total assets for the year under review thus rise to 4,637,794,799 marks.

Financial Results of the Agricultural Credit Societies. — The total profit of these societies, which is found by subtracting the liabilities from the assets, was 6,537,396 marks as compared with 14,984,075 marks in the preceding year. For 10,938 societies the division of the profits and losses for the year under review is as follows: 159 societies had neither profits nor losses: 9,362 had profits amounting in all to 9,812,701 marks, an average of 1,048 per society; and 1,417 societies had a total loss of 3,275,305 marks, an average of 2,311 marks per society. In comparison with the preceding year, in which only 608 societies showed loss, the number of losses appears very high, which may also be attributed to the depreciation in the national loans.

§ 4. AGRICULTURAL CO-OPERATIVE SOCIETIES

FOR PURCHASE AND SALE.

Numerical Increase. — The group of agricultural co-operative societies next in importance is composed of societies for purchase and sale. In view of the results obtained by co-operation during the war the need of uniting in societies for the purchase of agricultural requisites has been more strongly felt in country districts.

The development of co-operative action in this direction during the year under review is evidenced by the great increase in the number of co-operative societies for purchase and sale, the increase being 204, nearly equal to that of the last year of peace, 1913-14, in which it was 236. The

TABLE III. — *Owned and Borrowed*

Federations	Owned capital			
	Share capital	Reserve funds	Total owned working capital	Percentage of total working capital
Ermland	602,172	2,278,385	2,880,557	3.4
Brandenburg	3,603,446	3,860,971	6,964,417	4.1
Pomerania	889,486	2,660,814	3,550,300	2.5
Posen II.	745,618	1,451,243	2,196,861	5.2
Silesia I.	1,947,518	5,070,624	7,018,142	3.3
» II.	784,973	2,697,326	3,482,299	3.0
Saxony	3,652,733	3,755,007	7,407,740	3.8
Schleswig-Holstein	1,070,560	2,087,604	3,158,164	2.4
Hanover	1,096,860	8,190,924	9,287,784	2.3
Westphalia	445,561	10,276,653	10,722,214	2.8
Kurhessen	283,461	681,796	965,257	3.7
Nassau	1,395,918	1,040,144	2,436,062	5.9
Rhenish Prussia I	3,285,205	2,904,411	6,189,616	5.7
» » II	722,312	5,672,327	6,394,639	2.5
» » III	1,081,754	3,532,318	4,614,072	3.0
<i>Kingdom of Prussia.</i>	<i>21,607,577</i>	<i>55,660,547</i>	<i>77,268,124</i>	<i>2.9</i>
Upper Bavaria	309,700	3,873,121	4,182,821	4.5
Lower »	291,293	2,505,402	2,796,695	2.1
Upper Palatinate	223,493	1,692,727	1,916,220	1.8
Upper Francon	180,070	1,573,443	1,753,513	1.9
Middle	70,534	1,411,872	1,482,406	3.2
Lower	444,231	4,001,427	4,455,658	2.9
Swabia	353,762	4,936,924	5,290,686	2.4
Palatinate	1,770,135	1,984,819	3,754,954	3.0
<i>Davarian Federation (Munich).</i>	<i>3,643,268</i>	<i>21,989,735</i>	<i>25,632,953</i>	<i>2.6</i>
Kingdom of Saxony	1,853,455	2,631,995	4,485,450	3.9
» Württemberg	3,714,835	6,398,491	10,113,326	3.2
Grand Duchy of Baden I	29,932	19,407	49,392	2.0
» » II.	6,489,543	5,149,744	11,639,287	6.3
» Hesse	3,605,666	2,805,988	6,411,654	2.8
» Mecklenburg	168,108	122,979	291,087	2.8
» Oldenburg	183,774	646,352	830,126	1.2
Alsace-Lorraine				
<i>Germany.</i>	<i>41,296,108</i>	<i>95,425,238</i>	<i>136,721,399</i>	<i>0.3</i>

ious Federations

Borrowed capital			
Deposits on current acc unit	Borrowed from central banks	Total borrowed working capital	Percentage of total working capital
1,508,445	60,117	82,466,011	96 6
64,191,060	2,062,294	161,405,717	95 9
43,375,336	3,784	138,827,216	97 5
2,984,326	940,482	40,061,305	94 8
75,265,268	2,988,459	203,027,819	96 7
5,899,243	705,055	113,683,567	97 0
51,080,144	362,993	186,280,868	96 2
46,124,818	1,890 163	127,683,102	97 6
92,809,473	2,162,590	400,022,362	97 7
69,836,123	646,224	585,077,005	98 2
1,703,821	73,522	25,361,686	96 4
6,417,210	18,982	38,552,826	94 1
15,775,571	185,036	103,336,763	94 3
47,266,510	167,540	256,499,932	97 6
3,942,568	2,525,863	147,678,020	97 0
528,243,516	14,794,054	2,609,964,229	97 1
10,345,807	169,961	149,584,899	97 3
3,696,257	108,906	131,350,748	97 9
2,086,780	39,587	90,416,253	97 9
3,052,017	40,668	91,217,707	96 1
386,696	10,195	45,763,981	96 9
1,822,632	171,183	148,548,581	97 1
8,592,176	160,441	216,030,278	97 7
57,122,377	—	120,341,093	97 0
87,165,212	701,241	992,969,237	97 5
11,876,794	—	108,485,437	93 4
92,634,008	22,513	305,238,559	96 8
90,556	—	2,485,437	98 1
4,233,355	630,307	172,617,847	93 7
74,704,375	363,198	224,202,245	97 2
2,535,329	654,701	9,966,516	97 2
31,820,502	375,808	68,365,856	97 9
833,303,677	17,541,912	4,494,536,057	97 0

societies formed, the societies dissolved and the net increase for each month are shown in the following table:

Month		Societies formed	Societies dissolved	Net increase
June	1918	10	2	8
July	"	24	—	24
August	"	17	—	17
September	"	18	—	18
October	"	18	1	17
November	"	10	—	10
December	"	7	2	5
January	1919	13	—	13
February	"	11	—	11
March	"	27	3	24
April	"	27	2	25
May	"	35	3	32
Total 1918-19 . . .		217	13	204

The least remarkable month is December, in this case as in that of the agricultural credit societies. It shows an increase of only 5. But there is no such marked difference between the development in the last half year of war and the first half year of peace. The progress in these two periods is a little more regular than that of the agricultural credit societies, though it is slightly accelerated in the second period. The total number of co-operative societies for purchase and sale was 3,320 on 1 June 1919, corresponding to about one-ninth of the whole number of agricultural co-operative societies in Germany (30,845).

The territorial distribution of co-operative societies for purchase and sale is very irregular. The zone in which they are most widely diffused lies in Western and Southern Germany. Of these societies, Baden alone has 920, Hesse 282, the Palatinate 202, Hesse-Nassau 152, etc. The remaining co-operative societies are chiefly divided among Hanover (339), Westphalia (289), Schleswig-Holstein (189), Posen (120) and Oldenburg (118). The States of the Reuss (Younger Branch), and of Schaumburg-Lippe have only one society each, and the States of Saxe-Altenburg, Reuss (Elder Branch), Lübeck and Bremen have none.

More than half the whole number of co-operative societies for purchase and sale — 1,881, or 56.6 per cent. — have limited liability, a form which is therefore, in their case much more important than among the agricultural credit societies. There are 1,436 co-operative societies, or 43.3 per cent., with unlimited liability, and lastly 3, or 1 per cent., with liability to make unlimited supplementary payments.

Of the 3,320 existing co-operative societies for purchase and sale, 2,446 were on 1 June affiliated to the National Federation. The number of those which furnished returns to the Federation respecting their working was 2,367, equal to 96.8 per cent. of all the co-operative societies for

purchase and sale affiliated to the Federation. As compared with the preceding year there was an increase of 3.5 per cent. in the number of those furnishing returns. The total number of members of the 2,367 co-operative societies amounted to 278,800. In the preceding year, for 2,213 co-operative societies the number of members was 248,701, showing a diminution of 34,000 in round numbers, which may be accounted for by the detachment of several federations, especially that of Alsace-Lorraine II. This diminution was almost compensated for in the year under review, when the total increase of the number of members was 30,000. It was especially noticeable in the federations of Hanover, Westphalia II, Prussia, Rhine Province I, Hesse and Oldenburg. Thus the average number of members rose from 114 per society in 1918 to 118 in 1919.

The Working Capital of Co-operative Societies for Purchase and Sale. — The working capital of the co-operative societies for purchase and sale increased steadily during the war. In the year under review, both the owned capital, formed of share capital and reserve funds, and the borrowed capital showed a further increase. The different amounts of these items of capital in individual federations, and also the average per society and per member appear in Table IV (p. 178).

The total amount of owned capital 26,422,588 marks (6,447,620 marks of share capital, and 19,994,968 marks of reserve fund) shows a considerable increase as compared with the preceding year, in which the amount was 23,396,631 marks. But the borrowed capital is more than four times the owned capital, and therefore the relative proportions cannot be regarded as satisfactory.

The total working capital increased considerably in the year under review, rising from 111,516,827 marks in 1918 to 115,890,087 marks in 1919. It must also be observed that the federations of Posen I and Westphalia I which in 1918 had 8.2 millions of marks in all of working capital were not included in the total for the year under review. If we subtract this sum from the total of 1918, the comparison of the two years shows an increase of 12.6 millions of marks.

The averages per society and per member have diminished for the year under review, as compared with 1918, from 51,772 to 49,294 marks, and from 452 to 417 marks respectively. But this diminution per society is only apparent, and depends on the fact that the Federations of Posen I and Westphalia I are not included in the computation for 1919. Exclusive of the working capital of these federations in 1918, the amount per society would be 48,462 marks, and per member 428 marks. Thus in reality, in the year under review an increase of 830 marks per society was registered. The diminution per member was caused by the greatly increased number of members in 1919 as compared with 1918.

The Combined Purchase of Agricultural Requisites. — As stated at the beginning of this section, the increase in the number of co-operative societies for purchase and sale was considerable. But the development

TABLE IV. — *Owned and Borrowed Working Capital:
Totals and Averages per Society and per Member.*

Federations	Owned capital		Borrowed capital	Total working capital	Average working capital	
	Share capital	Reserve fund			per society	per member
East Prussia . . .	487,286	461,705	1,901,103	2,850,094	570,019	2,816
Ermland	55,085	127,195	1,633,334	1,815,614	151,301	1,307
Brandenburg . . .	104,039	186,545	896,938	1,187,522	296,880	1,207
Pomerania	993,522	6,463,148	40,858,061	48,314,731	2,100,640	2,859
Posen II	402,535	620,756	6,107,799	7,131,090	356,555	1,759
Silesia I	3,810	18,789	59,355	81,984	81,984	1,065
Silesia II	218,210	626,844	2,293,667	3,138,721	71,335	571
Prov. of Saxony .	165,656	426,492	4,302,449	4,894,597	128,805	1,219
Schleswig-Holstein.	110,097	311,647	1,551,211	1,972,955	13,421	211
Hanover	449,158	1,815,892	4,331,152	6,596,202	24,613	198
Westphalia II . .	149,600	2,403,156	2,496,422	5,049,178	20,609	157
Nassau	124,919	206,747	171,928	503,594	7,194	107
Rhine Prussia I .	574,988	633,525	1,187,397	2,395,910	15,763	92
Rhine Renana II .	327,748	756,215	3,186,186	4,270,149	53,377	580
Bavaria	40,070	507,860	830,876	1,378,806	91,920	1,889
Palatinate	156,901	498,895	1,416,009	2,071,805	15,234	123
Saxony	846,862	1,173,487	9,410,724	11,431,073	154,474	1,378
Wurtemberg . . .	568,785	702,440	2,696,063	3,967,288	141,689	524
Baden	276,902	1,060,097	1,406,347	2,743,346	3,856	40
Hesse	280,085	678,789	1,642,510	2,651,384	12,942	146
Oldenburg	111,332	314,744	1,067,968	1,494,044	14,403	128
Total	6,447,620	19,994,968	89,447,499	115,890,067	49,294	417

of the work of these co-operative societies did not advance at the same pace. With regard to the combined purchase of agricultural requisites, the after effects of the war and its result were felt in the course of 1918-19 in a greater measure than before. The principal chemical fertilizers were either unobtainable, or were only obtainable in very inadequate quantities. The market for feeding stuffs was no longer in a position to provide for the needs of the live stock of the country although the number of head of stock was already seriously reduced. At the same time prices were perceptibly rising. Under these conditions it was natural that the purchases of fertilizers and feeding stuffs should diminish considerably in 1918-19, especially if we keep in mind that for 1919 the three federations of Posen I, Westphalia I and Rhenish Prussia III (to all of which, however, a comparatively small number of co-operative societies belong)

furnished no returns. But the value is money of the requisites purchased in the year under review increased considerably in consequence of the great rise in cost of all agricultural requisites. Table V (page 180) shows the quantities for the last two years, and for single federations, of the requisites purchased and their value.

As shown in Table V the total value of agricultural requisites rose from 159,621,555 marks in 1918 to 182,501,569 marks in 1919; an increase of 22.9 millions of marks, or 14.3 per cent. This increase is the more remarkable because the number of co-operative societies which furnished returns was 1,979 in the first case and 1,608 in the second.

Although the value had increased there was a diminution in the quantity of fertilizers purchased (though the number of co-operative societies furnishing returns had increased) from 19,773,676 half quintals in 1918 to 14,975.675 in 1919, *i. e.*, 4,798,000 half quintals less. Similarly in the quantity of food stuffs purchased there was a diminution from 3,785,962 half quintals in 1918 to 1,076,766 in 1919, *i. e.*, 2,715,196 half quintals less. The average quantity of fertilizers and feeding stuffs purchased per member fell from 27 half quintals in 1918 to 9 in 1919. For seeds alone an increase was registered, of 124,722 half quintals the number of societies that furnished returns being almost the same.

We may repeat that in general as regards combined purchases for the year under review the case was the same as during the war period; a continual increase in the value of agricultural requisites and at the same time a diminution in the quantity.

The Combined Sale of Agricultural Produce. — The combined sale of agricultural produce, which during the war years acquired a continually increasing importance, and in contrast with its more or less stationary position in pre-war times was continually increasing, now in the year under review has, for the first time since the beginning of the war, shown a diminution, both as regards the quantity and the value of the goods sold.

While the value of the agricultural produce sold rose in the years 1916, 1917 and 1918, to 112.3, 241.8 and 273.5 millions of marks, it was in 1919, 163,993,639 marks, a diminution of 109.6 millions of marks as compared with the preceding year. The quantity of cereals sold fell from 14.2 million half quintals to 7.5 millions, a difference of 6.7 million half quintals. The sale of potatoes alone registered an increase of 1.3 million half quintals. Of course we cannot as yet say whether this diminution in the sales is to be considered as transitory, and the effect of the shocks inevitable in the process of re-organisation of the sale of commodities, or whether it is likely to endure.

The Financial Results. — The financial results of the co-operative societies for purchase and sale may be stated as follows: the group of co-operative societies which closed the year without profit or loss diminished from 81 in 1918 to 72 in 1919; the number of societies which closed

TABLE V. — Quantity and Value of Agricultural Requisites Purchased in 1918 and 1919.

Federations	Fertilizers (½ quintals)		Feeding stuffs (¼ quintals)		Seeds (½ quintals)		Total value in marks of combined purchases	
	1918 (1,802 co-op. societies)	1919 (1,877 co-op. societies)	1918 (966 co-op. societies)	1919 (745 co-op. societies)	1918 (1,282 co-op. societies)	1919 (1,284 co-op. societies)	1918 (1,979 co-op. societies)	1919 (1,608 co-op. societies)
East Prussia	343,866	326,004	59,222	46,511	7,579	8,017	812,697	7,483,323
Ermland	199,799	223,517	3,448	1,262	531	832	573,661	2,315,596
Brandenburg	147,678	148,868	4,707	4,707	4,064	4,073	1,961,455	2,092,422
Pomerania	4,600,291	4,729,921	1,067,832	291,426	36,254	24,704	42,680,075	42,812,049
Posen I	539,217	—	149,248	—	32,543	—	5,420,922	—
Posen II	197,352	120,571	128,213	123,788	9,456	13,820	9,938,972	22,095,504
Silesia I	12,265	—	260	—	—	—	139,363	—
Silesia II	448,681	96,631	892,387	9,933	14,546	3,329	10,580,116	17,690,879
Prov. of Saxony	245,808	206,577	35,350	21,512	48,606	8,682	2,423,334	2,420,495
Schlewig-Holstein	850,793	741,864	23,336	5,542	6,418	5,951	4,657,143	5,369,890
Hanover	1,447,748	2,372,138	240,501	85,197	29,946	41,271	7,461,986	14,210,665
Westphalia I	8,697	—	200	—	75	—	—	—
Westphalia II	2,137,380	1,786,621	359,774	121,118	63,794	239,279	15,054,218	15,357,870
Nassau	46,636	26,816	228	556	1,224	4,127	901,713	2,206,004
Rhenish Prussia I	474,441	479,944	51,356	43,492	25,644	16,468	6,102,960	6,465,656
Rhenish Prussia II	—	—	—	—	—	—	19,517,871	15,098,402
Bavaria	133,075	157,422	51,011	16,795	799	1,311	340,146	32,108
Palatinate	330,955	310,780	19,335	8,309	11,994	22,602	3,012,003	3,735,274
Saxony	659,139	783,279	177,715	81,912	16,480	14,090	9,495,364	8,236,560
Württemberg	95,358	104,827	53,721	64,641	61,460	2,184	483,643	633,494
Baden	702,000	1,052,320	220,206	83,476	58,850	101,552	1,918,839	1,736,882
Hesse	373,486	421,983	77,588	44,878	26,449	46,614	5,645,761	7,328,651
Oldenburg	6,773,011	882,592	169,834	14,801	51,426	17,618	5,492,213	4,680,445
TOTAL	19,773,676	14,975,675	3,785,962	1,070,766	458,193	582,915	159,621,555	182,501,569

the year with a loss was 1,311 against 809 in 1918; the number of societies which made a profit increased from 1,859 to 2,008; the average profit per society was 1,859 marks in the year under review as compared with 3,196 marks in the preceding year.

(To be continued)

UNITED STATES.

THE ORGANIZATION OF CO-OPERATIVE GRAIN ELEVATOR COMPANIES.

SOURCE:

MEHL (J. M.) and JESSNESS (O. B.): The Organization of Co-operative Grain Elevator Companies. United States Department of Agriculture Bulletin No 860. Washington, D. C., 20 August 1920.

The United States Department of Agriculture has recently published a Bulletin containing detailed instructions for the formation of co-operative grain elevator companies. As the co-operative laws and the laws governing corporations differ from State to State, the suggestions and recommendations are limited to matters which are regarded as fundamental and general and they have, therefore, an interest which is not confined to the United States.

§ 1. CONDITIONS OF SUCCESS.

The writers of the Bulletin lay down the principles that the success of any organization, whether co-operative or for private profit, rests upon: (1) Social or economic need; (2) a sound organization plan, and (3) efficient management.

A co-operative elevator company, like any other business organization, must eventually fail unless it secures to the community some substantial benefit or service. Its plans of organization must be definite and practicable and must anticipate the practical problems and difficulties to be met in actual operations. It must be conducted under efficient management and in accordance with a well-defined business policy.

§ 2. FORMS OF ORGANIZATION.

Many farmers' elevator companies have been formed in the United States as ordinary private corporations of the capital-stock form. Indeed when their formation was proceeding most rapidly this was almost the only form of organization which it was possible to adopt. Almost all of them attempted by means of their by-laws to secure some of the co-oper-

ative features specially authorized by the co-operative laws which have since been enacted. Amongst these features were the principle of one man one vote ; limitations upon share ownership ; and (though not so frequently) the patronage refund and restricted dividend on capital stock, which are now considered essential features of a really co-operative company. On the whole these companies worked remarkably well, but difficulties arose when the membership changed and the interests of the stockholders became those of investors rather than of producers.

Of the 4000 or more farmers' elevator companies in the United States a large majority were at the time of organization co-operative in purpose, if not in form or effect. Perhaps one third are now co-operative in the sense that earnings over and above operating expenses and a reasonable rate of interest on capital are distributed on the basis of patronage furnished.

Most of the grain States now have co-operative laws which authorize patronage dividends and other co-operative features. The laws of some of the States do not, however, provide for (1) limitation of voting power to one vote per member, regardless of the number of shares or the amount of capital stock owned ; (2) limitation upon the number of shares or amount of capital stock that any single member may own ; (3) restrictions upon the power to sell or dispose of shares of stock except to persons acceptable for membership in the association.

The writers of the Bulletin suggest that in States where each stockholder is entitled to one vote for each share of stock owned, what amounts to a one-man, one-vote rule may be secured by issuing only one share of stock to each member, but providing different classes of stock with shares of varying par value. Some of the desirable co-operative features which are not specially authorized by the laws under which an organization is incorporated and which might not be valid as a by-law provision alone, may possibly be secured by means of a contract arrangement made at the time of issuing the stock certificate. All by-law provisions in regard to the legal validity of which there is any doubt should be made the subject of a special contract by having them printed on the stock certificates.

§ 3. PRELIMINARY SURVEY.

Before the organization of a co-operative elevator company is attempted or advised, a careful and unprejudiced survey of local conditions should be made in order to determine the economic need and to secure information which will be of assistance later.

First it will be desirable to study the conditions under which grain is generally marketed in the community. Whether or not that community is normally devoted to feeding or to shipping is of importance. The fact that marketing facilities are grossly inadequate one year does not necessarily indicate that additional facilities can be supported advantageously during a series of years. A fair comparison should be made be-

tween prices paid by local dealers and prices obtaining in the principal terminal markets with due reference to freight and other charges deductible therefrom. In making a study of local marketing conditions it will be desirable to secure the services and advice of some practical grain man. If available, the advice of managers of successful neighbouring associations will be specially valuable.

Information regarding the amount of grain shipped from any station during a period of several years should be obtained from local representatives of railroads, from the general offices of such railroads or from bodies having charge of transport matters within the State. The average volume of grain shipped annually from a certain station having been determined, its division among already existing agencies should be considered. Although the need for co-operative marketing cannot always be judged from the number of existing commercial agencies, as it may sometimes be made necessary by reason of there being too many such agencies, their number and character become of vital importance in estimating the probable success of additional marketing facilities. If from a conservative study of local conditions and as a strictly business proposition, it does not appear that a co-operative company is likely to be successful, its organization had better be held in abeyance.

A co-operative elevator to be successful must, first of all, have a membership considerable in number and sufficient to insure a dependable patronage from the start.

Prospective membership should be determined, if possible, by actual personal canvass of the community.

A careful estimate should also be made of the capital which the prospective members may be expected to furnish. This estimate will be of value in apportioning the equitable share of the total capital required which each member should be asked to subscribe. It is a mistake to ask prospective members to subscribe for as much as they can afford up to a certain maximum amount. This method may be effective in raising the required amount of capital quickly, but may also result in eliminating many desirable members because of relaxation of effort when sufficient capital is in sight. Prospective members will subscribe more readily when solicited for a definite amount which has been determined and apportioned according to an equitable estimate of what should be furnished by each.

A careful canvass should be made of the patronage which prospective members may be depended upon to furnish. It must not be assumed that when a co-operative elevator has been established it will receive most of the local grain business as a matter of course. While successful co-operative elevators usually handle the bulk of the grain shipped from a particular station, they do so because of having first laid a substantial foundation in the form of a large producing membership.

The method suggested for carrying out the preliminary survey is first to hold one or more general meetings at which the need and readiness of the community for co-operative organization should be thoroughly discussed. The survey may then be carried out by com-

mittees appointed at the first general meeting or by persons interested in the project. At or following the meetings or in lieu of them, where it is found desirable to conduct the preliminary survey quietly, a tentative subscription list may be circulated on which is shown the names of prospective members, the amount of capital which each member thinks he can subscribe, and a conservative estimate in bushels of the grain which he markets annually. If it is impracticable to secure actual signatures to the tentative subscription list, then a list should be prepared in memorandum form. It will also be desirable to determine in a general way the character and cost of the plant and equipment necessary to handle the business in order to ascertain the approximate amount of capital required.

§ 4. ORGANIZATION AND INCORPORATION.

It will now be necessary to call a general meeting to perfect the organization. At this meeting a chairman and secretary should be elected and the following committees appointed: (1) Committee on membership and stock subscription; (2) committee on incorporation and by-laws; and (3) committee on buildings and plant site. From three to five members on each committee are sufficient.

The plan of organization should be thoroughly discussed at the meeting in order that the several committees may be instructed relative to the wishes of those present.

Formal organization, including incorporation, adoption of by-laws, and election of the first directors can be carried out more expeditiously and with greater exactness by a small member of incorporators than by a large body of members.

A form of by-laws is included in the Bulletin; it embodies the principles of co-operation most necessary to observe in a co-operative grain elevator company. We give in full the article relating to the distribution of profits:

Section 1. *Apportioned.* — At the end of each fiscal year the total net earnings of the Association which remain over and above all expenses and a reserve for depreciation shall be apportioned in the following manner:

(a) *Surplus.* — There shall be appropriated for the purpose of creating a surplus not less than (ten) per cent. of the net earnings until such surplus shall equal at least (fifty) per cent. of the capital stock paid.

(b) *Dividend on capital stock.* — There shall be appropriated for the purpose of providing a dividend on capital stock a sum which shall equal but not exceed (six) per cent. of the amount of capital stock issued and outstanding.

(c) *Educational.* — There may be appropriated for educational purposes and for promoting co-operation and improvement in agriculture a sum equal to (five) per cent. of the net earnings.

(d) *Patronage refund.* — The remainder of the net earnings shall be apportioned upon patronage in accordance with the method stipulated in section 2.

Section 2. *Method of refund.* — The earnings upon grain operations,

the earnings upon miscellaneous products, and the earnings upon supplies and merchandise operations shall be segregated into groups (a), (b) and (c) respectively. Additional groups shall be established only as are necessary to provide for various commodities handled on widely varying net margins. Special transactions handled on the basis of actual cost of service shall be excluded in computing patronage refunds hereunder.

(a) *Grain rate.* — The total net earnings which accrue from grain operations after deducting an equitable proportion of all expenses and the appropriations provided for in section 1 shall be divided by the total number of bushels of grain of all kinds bought by the Association during the year. The result shall be the patronage refund rate per bushel to be applied to grain purchased from members.

(b) *Miscellaneous products rate.* — Patronage refund rates for other products bought by the Association shall be determined in the same manner as provided for grain except that they may for convenience be determined upon the basis of money value, instead of per unit, at the discretion of the Board of Directors.

(c) *Merchandise rate.* — The total net merchandise earnings which accrue from merchandise and supplies operations after deducting an equitable proportion of all expenses and the appropriations provided for in section 1 shall be divided by the total volume in dollars of the merchandise sales during the year. The results shall be the patronage refund rate in per cent. to be applied to merchandise sales.

Section 3. *Members' share.* — Each member shall receive patronage refund based upon the total volume of grain and other products sold to the Association and the volume of supplies and merchandise of all kinds bought from the Association during the year, which shall be computed by applying the refund rates as determined under division (a), (b) and (c) of section 2 hereof.

Section 4. *Nonmembers' share.* — Each nonmember may receive patronage refunds under the provisions of this article at the rate which is paid to members, provided that refunds appearing to his credit may first be applied to the purchase for him of one or more shares of the capital stock of this Association.

Section 5. *Disposal of unapportioned share and nonmembers' unapplied refund.* — If nonmembers share in patronage refunds at a rate less than the rate paid to members the difference may be diverted to the surplus of the Association, or may be distributed among the members in such manner as the Board of Directors may determine. In like manner any portion of the patronage refunds payable to nonmembers which is not accepted under the conditions of section 4 may be similarly diverted or distributed, but patronage refunds payable to nonmembers shall be carried under separate account for a period of (two) years before being so diverted or distributed.

Section 6. *Notice of refund due nonmembers.* — At least once each year there shall be mailed to each nonmember entitled to refund, a notice which shall state the amount of refund due and the conditions under which

the refund will be made, and which shall contain a suitable form of application for membership.

Section 7. *Capital impairment.* — In no event shall dividends on capital stock as provided for in division (b) of section 1, hereof, be paid out of the capital stock, but in case the earnings of the Association in any year shall be insufficient for this purpose, a sum equal to such deficiency may be set aside from the earnings of the following year before any portion of these earnings is made available for patronage refunds.

The work of the committee appointed to secure stock and membership subscriptions should proceed along lines which have been worked out carefully in advance. The entire community or territory from which membership is to be drawn should be laid off in districts and men should be selected to canvass the district who have a wide acquaintance and are favourably known in the community. A record should be kept by each solicitor of persons visited who have failed to subscribe and of the reasons given. If possible, these persons should be visited a second time by a different solicitor.

The employment of a special salesman to place the stock on a commission basis is seldom advisable and should only be resorted to when it is impossible to secure the right type of men to serve on the committee.

If possible the articles of association should be drafted with the assistance of competent legal counsel and be made to legalize all matters set up in the tentative by-laws. Even very able lawyers sometimes are not thoroughly acquainted with the objects and economic principles that control co-operative companies, and they may with the best of intentions advise organization on some plan with which they are more familiar and which offers less difficulties than does the organization of a truly co-operative association. Herein lies the value of having prepared and decided upon in advance a form of by-laws embodying co-operative principles. The procedure for securing a charter varies in the different States, but in general it may be effected by having a minimum of 3 to 25 persons, depending upon statutory requirements, sign the articles of association, which articles or certified copies thereof are filed with certain State and county officers.

§ 5. SELECTION OF PLANT.

In the selection of the type of plant and the location the first point to be decided is whether to purchase an existing elevator plant or to build a new one. It is usually considered advisable to purchase one of the local elevators if one is for sale and if it is found suitable for the purpose.

While the size and equipment of the plant must depend always upon local conditions, a smaller and better equipped plant is preferable to one larger and less efficiently equipped. It should be remembered that a large storage capacity may be desirable for certain purposes but that with such a plant there is ever present the temptation to fill it. During periods when cars are difficult to obtain and the condition of grain is such that

it can be stored on the farm more safely than in an elevator it is almost impossible for managers to refuse to receive grain while a storage space remains, and the chance for financial loss through deterioration is made the greater by having excessive storage capacity. An elevator which has a capacity of from 25,000 to 35,000 bushels, equipped in a modern manner, and capable of being emptied quickly when cars are available seems to be the plant generally favoured by elevator companies which do not make a practice of storing grain for a storage charge.

In the selection of a plant type it may be well to have in mind possible extension and enlargements and to plan accordingly. Concrete construction offers stability and economy in insurance costs. On the other hand, wood and steel offer advantages when remodelling to meet change of conditions.

§ 6. DIRECTORS AND MANAGER.

The directors are responsible to the membership for the successful conduct of the affairs of the organization. The type of men selected will have much to do with keeping the confidence and loyalty of the membership. They should possess keen business judgement, but in carrying out their duties they should be able to subordinate their private interests and to work for the welfare of the organization. Men with a reputation for honesty and for open-minded conservative judgement are to be preferred. They should, of course, be competent and should believe in the co-operative system.

The most important duty which the directors will have to perform is the selection of a business manager. All personal preference must be laid aside, and the interests of the company as a whole be considered. The position of manager of a co-operative elevator company is a peculiarly difficult one; the individual members must be satisfied and at the same time the financial interests of the company conserved. It requires a man with tact, with ability to appraise human nature, and with the rare faculty of being able to decide impersonally against individual members in matters of controversy without giving offence.

§ 7. MAINTENANCE AGREEMENT.

The suggested form of by-laws does not contain the so-called penalty clause, which at one time was regarded as of much importance. In its most simple form the penalty clause provided for a payment to the company of a charge of 1 or 2 cents per bushel for every bushel of grain which any member of the company should market through other agencies or dealers. It was intended only as a voluntary and mutual arrangement whereby, if it became apparent that outside dealers were paying more for grain than it actually was worth in order to discredit the co-operative company, each member would contribute to the support of his company in the manner provided and as long as these conditions existed. The

members would then sell their grain to such outside dealers, making them fall victim to their own competitive methods. The clause provided an equitable means for contributing to the support of the co-operative company during an emergency. Other companies copied the idea, but lost sight of its real purpose and tried to make it a coercive means to compel patronage. Used in that way its presence in the by-laws has served only to antagonize the members and, quite apart from the legal difficulties in enforcing such a provision it is believed to have outlived its general usefulness. The patronage dividends in a truly co-operative company should furnish every inducement necessary to secure the patronage of the members without coercive means.

In case it becomes necessary to meet conditions brought about by other dealers paying more for grain than it is actually worth, a direct personal appeal to the members stating frankly existing conditions and probable conditions in the absence of the co-operative company would seem to be the better method. This might be followed by an attempt to protect and maintain the company in operation by means of a special contract arrangement. Companies that wish to incorporate into their by-laws a substitute for the so-called penalty clause may provide therein that each member upon joining the association shall sign such a contract. A form of contract is given in the Bulletin, of which the following are the operative clauses:

"That the Association shall establish equip and maintain an office and grain elevator at and there provide equipment, facilities, and means for weighing, grading, shipping and handling wheat, corn, oats, and barley of different variety and grade.

"That the Association shall there provide and have available to the Grower, market news and other information concerning the values and market condition of wheat, corn, oats and barley, of different variety and grade and shall furnish the same to the Grower on request.

"That the Association shall there employ and have available to the Grower the services of an elevator manager whose duty it shall be to secure and to furnish to the Grower upon request, in so far as it is practicable, all special market news, and other information and advice which the Grower may require relative to the marketing of grain and the procurement of seed grain.

"That the Association shall weight and grade any and all grain of the kinds herein described, whether sold to or marketed through the Association, or to or through any other dealer or agency, which the Grower shall present for weighing and grading at the Association's office at

"The Grower agrees to pay the Association for such advantages, privileges, use, market news information and weighing and grading service at the rate of (one cent) per bushel for each and every bushel of wheat, corn, oats and barley which the Grower shall market either directly or indirectly to or through the Association or to or through any other dealer or agency during the life of this contract. Such charge shall become due and payable immediately upon the sale or delivery of any and all grain,

but shall not be applied to any grain which the said Grower shall have grown or come into possession of in territory not tributary to the shipping points of the Association.

It is mutually agreed that upon all the grain which the Grower shall sell to the Association or which he shall require the Association to handle through its elevator and warehouse at. . . the charge of (one cent) per bushel herein stipulated to be paid shall not be in addition to, but shall be a part of the whole charge or charges which may hereafter be established for elevation and loading and for other services and handling.

"It is further agreed that either party may terminate this contract on the first day of (July) of any year by giving notice in writing to the other party at least (ten) days prior to said date of the intent to so terminate. Termination shall then be effective on the said (first day of July), otherwise the contract shall continue in full force and effect so long as the Grower shall reside in territory tributary to the Association's office and shipping points, or shall continue to market any wheat, corn, oats or barley in said territory."

Unlike the penalty clause, this agreement does not rest upon any assumption of damage, but upon a tangible and valuable service which is sold to the members for a charge. The rate of charge varies with the kind of service rendered and is applied to all grain marketed by a member, with the exception that upon grain sold to the association, the charge is included with the usual buying margin and is not applied separately.

§ 8. EMERGENCY CAPITAL.

The means whereby emergency capital is being provided by many companies deserves attention. Comparatively few organizations have sufficient capital to carry them over the periods of heavy marketing without having to resort to loans. This is especially true of the new company which has not had an opportunity to accumulate surplus funds. The capital required at such times often exceeds the corporate borrowing power. It is neither necessary nor always desirable than an organization should have sufficient capital of its own to meet these emergencies, but frequently directors are required to pledge their own personal credit for these loans, which manifestly is unfair. The directors in many cases are placed in the position of having exceeded their corporate authority and in the event of financial difficulty might be placed in an embarrassing situation. Sometimes the more prosperous members are prevailed upon to postpone grain settlements, until after the period of heavy movement. This is equally unfair, since they are then placed in the position of unsecured creditors and are thereby required to assume individual responsibilities and risks not shared by the membership as a whole. Emergency capital is necessitated by the business in its entirety and should be furnished by the entire membership. If each member can be induced to give his accommodation note for a just proportion of the emergency capital requirements

and such note be made available for the purpose of collateral security to support emergency loans only, the responsibility to a great extent will be divided among the membership. The following form of note is suggested:

19

On demand, for value received, I promise to pay to (The Grain Growers Co-operative Association) or order..... Dollars \$..... without interest

Payable at :

In some communities there is a deep-seated prejudice against the giving of notes for any purpose and it may be difficult to secure from the members the individual loan notes here suggested. Where this condition exists it may be less difficult to get all the members to sign one contract in common whereby each member guarantees the credit of the association up to and including some definite amount to be placed opposite his signature. For this purpose the following form is suggested :

To Bank :

In consideration of your having at our request agreed to advance to (the Grain Growers' Co-operative Association) any sums of money it may require during the life of this contract not to exceed at any one time the total amount guaranteed hereunder :

We, the undersigned members of (The..... Grain Growers' Co-operative Association) hereby guarantee to you the repayment by the said (the Grain Growers' Co-operative Association) of all sums of money, advanced by you to it as aforesaid, with interest at the rate of . . . per cent. per annum, but subject to the limit on our aggregate and individual liability hereafter expressed.

1. This guaranty shall be a continuing guaranty, but our aggregate liability shall not under any circumstances exceed the sum of \$..... and the proportionate share or liability of each of us individually in respect of the said sum shall not exceed in amount the sum placed opposite our respective signatures at the foot hereof.

2. Within the aforesaid limits of liability this guaranty shall extend and be applicable to the whole debt that shall ultimately be due to you from (the Grain Growers' Co-operative Association) in respect to money advanced by you as aforesaid, and not merely to so much thereof as shall be co-extensive with our aforesaid maximum aggregate liability thereunder.

3. You shall be at liberty without discharging us from our liability hereunder to grant time or other indulgence to the said (the..... Grain Growers Co-operative Association) in respect to money advanced by you to it as aforesaid, and to accept payment from it in cash or by means of negotiable instruments and to treat with it in all respects as though we are jointly liable with it as debtors instead of being merely sureties for the debtor.

4. In order to give full effect to the provisions of this guaranty we hereby waive and each of us hereby waives all suretyship and other right inconsistent with such provisions and which we might otherwise be entitled to claim and enforce. We hereby waive and each of us hereby waives all notice respecting your acceptance of and assent to this guaranty and all notice necessary to charge us as guarantors hereunder.

5. Each guarantor shall be at liberty at any time to withdraw from all liability hereunder on payment to you of such sum as shall represent the proportion which his individual liability hereunder shall bear to the aggregate sum of advances made to (the Grain Growers' Co-operative Association) and remaining unpaid at the time of his withdrawal. In the event of the death of any surety his personal representatives shall be at liberty to exercise a like power of withdrawal, and shall thereby relieve his estate from future liability under this guaranty:

Executed at this day of 192. .

Signatures of Guarantors	Amount guaranteed
.
.
.

§ 10. THE DANGER OF SPECULATING.

A weakness on the part of farmers' elevator organizations which possibly is responsible for more failures than all other causes combined is the lack of an effective safeguard against well-meaning speculation. Managers buy grain with a definite margin of profit in view. In many cases this margin is determined by bids or offers in hand on which grain may be sold. Between the time of purchase and the time when sale conveniently can be made, market changes take place which affect the bids or offers on which the purchase price was based. Should the effect of these changes be to narrow or liquidate the expected margin a temptation is presented to hold the grain for a reaction which may not come. Should the effect of market changes be to increase the visible margin, the manager may feel that the market trend is upward and be inclined to speculate with the excess margins in the hope of increasing them still further. Not infrequently the tendency upon the part of managers to speculate in this way is encouraged by directors in the organization who are glad to receive the benefits of successful speculation but who are not slow to shift responsibility when the manager is found on the losing side of the market.

Steps should be taken by members, directors and managers to agree upon some definite policy, which policy should be strictly adhered to. If cars cannot be secured with which to take care of time shipments and purchases cannot safely be hedged, it is an inopportune time to permit purchased grain to accumulate in the elevator. The risk of loss through declining markets should not then be allowed to shift from the individual

member to the organization. Grain should remain on the farm or in storage until such time as a price that is fair to the farmer can be fixed and the handling charges can be definitely determined. The directors should be directly responsible for the preparation of a daily statement by the manager or bookkeeper which should be filed in the office of the company and which should show the number of bushels of grain of each kind which is being carried unsold or oversold as the case may be. Failure of the manager to keep within a stipulated number of bushels long or short should be followed by dismissal. The province of a farmers' elevator is extensive, and its legitimate activities are many, but speculation, well-meaning or otherwise, is foreign to its intent and purpose and must be carefully guarded against if lasting success is to be attained.

MISCELLANEOUS INFORMATION RELATING TO CO-OPERATION AND ASSOCIATION.

ALGERIA.

THE TOBACCO-GROWERS' CO-OPERATIVE SOCIETY OF THE BONA DISTRICT. —
Revue agricole de l'Afrique du Nord, Algiers, 1 April 1921.

The tobacco-growers of the Bona district formed on 3 March, a co-operative society with strict rules obliging its members to deliver the whole of their crop and to cultivate the precise areas fixed in advance by the society.

Very large warehouses will be built so that the society may store the crop produced in the district, that of 1920 having reached six thousand tons.

Moreover, the Society will devote large sums to the establishment of experiment stations and it will exert a constant effort to obtain an improvement in the tobacco produced.

Tobacco being a State monopoly in France, the Society has offered the administration of the Monopoly to sign an agreement for ten years, by which it will undertake to supply the State factories with prepared, fermented and packed tobacco, delivered on the quay at Marseilles. Each year the Administration will indicate the quantities which it desires to obtain in the course of the following year. Basing its calculations on this statement, the co-operative society will then estimate the quantities required for Algeria and for exportation. Finally, according to the ascertained total, it will determine for each of its members the areas to be cultivated. The Administration of the State factories will receive each year the proportion which is due to it.

The Administration will also receive in its warehouses the tobacco produced by growers not belonging to the society, but will only place at their disposal half of its storage-room, the other half being reserved for the co-operative society. It will not pay to non-members a price higher than it pays to the society; the latter, on the other hand, will in no case sell its tobacco at prices lower than those offered by the Administration.

EGYPT.

THE GENERAL SYNDICATE FOR THE DEFENCE OF FARMERS' INTERESTS. —
Bulletin Commercial Alexandria, 27 February 1921.

Under the name of General Syndicate for the Defence of the Farmers' Interests, an association has just been formed of which the object is, according to the terms of article 2 of its rules, "to defend by every legal means the farmers of Egypt, and to protect their material and moral interests, by the following methods ;

"A. — It will develop production by increasing the crops of Egypt, improving the produce and increasing the profits :

"(1) By conducting researches and agricultural experiments both in Egypt and abroad ;

"(2) By encouraging through money gratuities and subsidies any efforts made to improve Egyptian produce or cattle, or to find remedies for diseases of live stock.

"(3) By giving advice on all questions relating to crops in Egypt ;

"(4) By aiding members of the syndicate to obtain the best kinds of seeds, fertilizers and all other articles required for agriculture ;

"(5) By providing them with facilities for obtaining the credit they need for the cultivation of their land.

"B. — It will endeavour to effect the sale of Egyptian produce in local and foreign markets :

"(1) By collecting statistics and useful information concerning the amount of produce annually required for local and foreign consumption, the quantities consumed or kept in stock in former seasons, the current prices of such produce and the varieties required for consumption in the years to come ;

"(2) By trying to establish direct relations between the producers on the one hand and the consumers and manufacturers on the other ;

"(3) By helping members of the Syndicate to obtain the credit they require to enable them to hold their crops :

"(4) By organizing systems of maintaining the prices of produce in critical times ;

"(5) By establishing offices for propaganda, information and statistics both in Egypt and out of Egypt ;

"(6) By encouraging every enterprise, association or society, established for any of the above mentioned objects ;

"C. — In a word the Syndicate shall turn its attention to everything which may be useful to Egyptian cultivators as regards production, sale of crops, or necessary credit."

The Syndicate, will have its head quarters in Cairo and proposes to establish agencies in Egypt and abroad.

FRANCE.

TEN YEARS' CO-OPERATION FOR THE MANUFACTURE AND SALE OF WINE. —
ARDOUIN DUMAZET. Les co-operatives viticoles *Journal d'agriculture pratique*, Paris,
12 March 1921

Ten years ago the co-operative movement began in the commune of Vosne-Romanée (Côte-d'Or), the wines of which are among the most highly esteemed in Burgundy. Until 1909, the whole trade was in the hands of agents, at least as regards the small proprietors, who, being ill provided with appliances for preparing, preserving, and treating wine, were obliged to sell their grapes to these middlemen. As the crop could not wait, the agents could impose whatever conditions they pleased. The produce was small; the owner of a vineyard who could not prepare his own wine lived in penury while the trade realized enormous profits.

Seventeen owners of small vineyards formed a co-operative society, and shared the task of providing premises and supplying vessels, vats, and presses and putting them in order. Every member had in the common store his cask or casks, and barrels for his wine. With very moderate funds, and with shares at 40 francs, of which only the fourth part was paid up, a society was formed which was able to borrow from 12,000 to 15,000 francs at a moderate rate of interest.

The first vintage showed the advantages of co-operation. That year the agents paid a price for the grapes which represented 130 fr. per cask of wine. Now the crop of the members of the co-operative society, sold five or six months later at a favourable moment, reached 250 to 270 fr. per cask, that is, double the amount they would have received by selling the grapes. This result having been achieved, those who had hesitated rallied to the co-operative society. At the present time all the vine-growers of Vosne belong to it, and the neighbouring communes have followed the example set. Co-operation is now the rule. In order to ensure regular profits, the co-operators utilize the residue for making brandy, as by the sale of this last all expenses can be met.

The mother co-operative society, that of Vosne-Romanée, is now flourishing; it made 500 casks of wine in 1915, half of which was sold for a total sum of 500,000 francs. The sale of part of the brandy paid the cost of the whole plant required; crushers, grape-pickers, presses are worked by an electric motor, the cellars are well kept, and the offices in good order. This represents a sum of about 50,000 francs.

The work of the vine-growers is not confined to the manufacture of wine and brandy; the co-operative societies have imposed upon their members identical methods for pruning and for the treatment of the crops in certain years; for instance, in case of hail it is required that the grapes should be made into white wine and not into red wine; the co-operative society takes the place of the municipality for the proclamation of the vintage, and it organizes the carrying the grapes by turns to the press so as to avoid obstruction. By degrees the methods of wine making are becoming free from empiricism.

The work of the press is carried on by gangs of six or eight men under a foreman (*cabot*); the wine is treated by a cooper-cellarman, aided by the co-operators in turn at the moment of drawing off. A committee appointed by the whole number of members superintends the works, and undertakes the sale of the wine and the division of the profits as soon as they come in.

There are now eleven vine-growing co-operative societies in the Côte-d'Or, some of which are not afraid to undertake the bottling of the wine. This work was begun during the war. At Vosne young girls, taking the places of the mobilized men, drew off the wine, labelled the bottles and placed them in cases or baskets. It was a time of hard labour, for the workers were all old men, women and boys, but neither vineyards nor cellars were neglected.

The work of bottling, now found easy, is continued, and the co-operative societies are contemplating combining it regularly with their other labours, and employing commercial travellers to offer their wines to restaurants and private persons. An effort has even been made to begin direct foreign trade.

These results have not been attained without rousing hostility among the middlemen. Purchasers of grapes, wine agents, tradesmen have all tried to thwart the societies by refusing their crops. But the co-operative societies, dealing in choice produce of authentic growth, find that the wholesale trade is addressing itself to them.

GREAT BRITAIN AND IRELAND.

AGRICULTURAL CO-OPERATION IN ENGLAND AND WALES IN 1918-19 AND 1919-20.
— REPORTS OF THE AGRICULTURAL ORGANIZATION SOCIETY FOR THE YEARS ENDING
31ST MARCH 1919 AND 31ST MARCH 1920. London, 1919 and 1920.

The growth of agricultural co-operation in England and Wales was greatly retarded during the war by the shortage of feeding stuffs, fertilizers, etc., and the adoption under Government control of a general policy of distributing through ordinary trade channels on a datum period basis. Nevertheless, even before the signature of the armistice, there was a growing tendency among farmers to join societies with a view to post-war trade, and the cessation of hostilities brought with it a remarkable advance in co-operative development. From 1,121 at the end of 1918 the number of

societies affiliated to the Agricultural Organization Society rose to 1,428 at the end of 1919, and the aggregate turnover increased in much greater proportion, rising from a little more than £7,000,000 in 1918 to approximately £15,000,000 in 1919.

The Agricultural Organization Society. — This society, the propagandist body of the agricultural co-operative movement in England and Wales, was reorganized in 1918 by giving the control of the policy and administration to the affiliated societies, acting through directly elected Governors and Branch Committees. No distinction was made between the farmers' societies and the allotments and smallholding societies, though an attempt was made to adjust the relative voting strength by basing the voting power on a combination of membership and turnover. The enormous expansion of the allotments and smallholdings movement during the year 1919 led to a further modification in the constitution of the Society whereby in each branch area two separate Branch Committees will be set up; one will be elected by the farmers' societies in the area and the other by the allotments and smallholdings societies. Provision is made for cross representation on each committee and the Branch Organizing Secretary will act as secretary to both committees.

The method of election of the Governors has also been changed. Under the present system, the President is elected at the annual meeting; 30 Governors are elected by the farmers' societies, 15 by the allotments and smallholdings societies and one by the individual subscribers; four are co-opted by the Governors elected by the farmers' societies, and two by those elected by the allotments and smallholdings societies; two are nominated by the Ministry of Agriculture.

A great propaganda campaign was carried out by the Agricultural Organization Society in 1919. A fortnight was devoted to each branch area and about twenty meetings were held in each. The campaign was extremely successful. Not only did it lead to the formation of a number of new societies but it enabled the older societies greatly to increase their membership, capital and turnover. It is estimated that, on the average, 100 new members were secured at each meeting and £1000 of new capital was subscribed. It is noteworthy, also, that as a result of the campaign the leading farmers in each county have adhered to the movement; many of them had previously been inclined to consider co-operation only useful for the small producer.

The Formation of Large Societies. — In the two years under review the Agricultural Organization Society pursued the policy of advocating the formation of large farmers' societies, covering a county or a considerable portion of a county, which should be large enough to ensure a turnover which would warrant the employment of competent and well-paid managers, but not cover so wide an area that individual members would lose touch with their society. As a rule, the formation of general purposes societies is recommended rather than that of single purpose societies. This policy has shown itself to be acceptable to the farmers and at the date of the Report for 1919-20 of the Agricultural Organization Society there was in practically every agricultural district in England and Wales a strong society which was in a pos-

ition to supply the requisites and to handle the produce of the local farmers. A list of 78 such societies is given in the Report. Many of the societies establish dépôts to serve the various portions of their area and appoint local committees to supervise the working of these dépôts.

The Agricultural Wholesale Society. — Formed in 1918, the Agricultural Wholesale Society rapidly established its position as the central trading organization of the co-operative movement. Its turn-over in 1918 amounted to £321,000 and in the following year it increased tenfold, necessitating a very large increase of capital adequately to deal with the business entrusted to it by the societies. Already in its second year of existence the Agricultural Wholesale Society was obliged to decentralize its business and to adopt a system of local sections based on the principal ports. It also made arrangements for dealing with the produce of the co-operative slaughterhouses and for selling wool.

Dairy Societies. — Much progress has been made in the organization of dairy farmers, principally with a view to the sale of whole milk, but also for the making of cheese. The milk industry was thrown into confusion when control by the Ministry of Food was removed, but the co-operative dairy societies helped to steady prices and to keep them at an economic level. Some of the dairy societies do a very large business; the West Sussex and Hampshire Dairy Farmers, Ltd., for example, had a turnover in 1919 of \$411,000.

A few of the societies originated as cheese schools started under a scheme of the Board (now Ministry) of Agriculture. These are situated in districts where the milk produced had not previously been marketed as whole milk.

Co-operative Slaughterhouses. — A special scheme was entered into with the Ministry of Food for the taking over of Government slaughterhouses by farmers' cooperative societies. A considerable number of co-operative slaughterhouses are now working, the scheme being put in operation in most cases by already existing societies. Amongst these is the St. Edmundsbury Co-operative Bacon Factory which was formed in 1910 for the manufacture of bacon and besides dealing with an immense number of pigs, has acted as Government agents for the slaughter of cattle and sheep; its turnover in 1919 was \$220,720.

Egg-collecting Societies. — The action of the Ministry of Food in controlling the price of eggs and making no provision for a wholesaler's margin of profit greatly handicapped these societies. They have, however, recovered ground since the removal of the control. The Framlingham and Eastern Counties Co-operative Egg and Poultry Society still handles a larger quantity of eggs than any other society, its turnover in 1919 being \$249,227.

The Report for 1919 of the Agricultural Organization Society drew attention to a defect in the marketing of eggs by co-operative societies. Several societies which are handling eggs on a very large scale were competing against one another in the London market. At the same time a number of the smaller egg collecting societies were selling their eggs through the

Agricultural Wholesale Society, which had to dispose of them in the same quarters where the large societies were already competing.

Allotments and Small Holdings Societies. — The extraordinarily rapid progress of the co-operative allotments and small holdings societies is indicated by the following figures :

	31 March 1918	31 March 1919	31 March 1920
Number of societies . . .	436	692	982
Membership	72,989	100,000	150,000
		(approximate)	(approximate)

Apart from promoting the formation of new societies, the Agricultural Organization Society gives considerable assistance to the existing societies in their negotiations for extension of tenure or for the acquisition of new land.

Statistics for 1918 and 1919. — In the following tables were give statistics for 1918 and 1919 of agricultural co-operative societies in England and Wales.

TABLE I. — *Farmers' Co-operative Societies.*
A. *Statistics for 1918.*

Class of society	Number of societies	Number of members	Sales		
			Agricultural require- ments	Farm produce	Total
Societies for purchase of require- ments, etc.	255	41,226	3,954,932	742,114	4,697,046
Dairy societies	59	6,612	31,064	2,248,352	2,279,416
Egg and poultry societies	71	10,796	62,008	579,201	641,209
Auction mart and produce societies .	58	10,904	211,001	547,933	758,934
Total . . .	443	69,538	4,259,005	4,117,600	8,376,605

B. Statistics for 1919.

Class of society	Number of societies	Number of members	Agricultural require- ments	Sales	
				Farm produce	Total
Societies for purchase of require- ments, etc.	220	48,786	7,337,818	1,522,163	8,859,981
Dairy societies	57	5,731	976,630	2,605,428	3,582,058
Egg and poultry societies	57	11,267	61,929	514,094	576,023
Auction mart and produce societies .	36	5,894	72,294	298,524	370,818
Slaughterhouse societies	7	931	—	285,343	285,343
Total . . .	378	72,608	8,448,671	5,225,522	13,674,223

TABLE II. — *Small Holdings and Allotments Societies.*

	1918	1919
Number of societies	572	987
Number of members	90,320	110,105
Number of tenants	30,228	31,047
Acreage held :		
From public authority	10,380 acres	13,175 acres
From other landlords	4,549 "	2,154 "
Total acreage	14,929 "	15,329 "
Sales	£708,19	£147,494

TABLE III. — *Statistics of all Societies
affiliated to the Agricultural Organization Society.*

Group of societies	Number of societies		Number of societies		Turnover	
	1918	1919	1918	1919	1918	1919
Farmers' co-operative socie- ties	443	378	69,538	72,608	8,376,605	13,674,223
Small holdings and allot- ments societies	572	987	90,320	110,105	70,819	147,494
Credit societies	22	20	420	369	601	677
Miscellaneous societies . . .	84	41	8,080	5,523	420,726	36,476
Total . . .	1,121	1,426	168,358	189,605	8,868,751	13,858,870

It should be noted that the figures given for slaughterhouse societies only represent a small portion of the business of the co-operative slaughterhouses, since most of these are worked by societies for the purchase of requirements. In the same way, the figures for egg and poultry societies do not represent all the co-operative sales of eggs, since some societies for the purchase of requirements also sell eggs on a large scale.

In the statistics for 1918 the Agricultural Wholesale Society figures amongst the miscellaneous societies, whereas in 1919 it is classed amongst the societies for the purchase of requirements. Moreover in the statistics for 1919 the turnover was apparently not available and that of 1918 is given. As the business of this society had very largely increased in 1919, it would make an appreciable difference to the aggregate figures for 1919 if the correct turnover had been given.

HOLLAND.

THE RAIFFEISEN BANKS IN 1918. — JAARCIFERS VOOR HET KONINKRIJZ DER NEDERLANDER (*Statistical Year Book of the Kingdom of Holland*) 1919. The Hague, 1921.

In 1918 there were in Holland 1,115 Raiffeisen banks as compared with 1,067 in the previous year. Of these 1,115 banks, 1,105 have furnished information. These banks have, during the year, received 165,335 deposits, amounting to 135,728,000 florins, and have effected 84,626 repayments which, including interest, amounted to 92,819,000 florins, so that at the end of the year, the deposits amounted to 196,842,000 florins, divided among 216,559 depositors. The number of loans made during the year was 9,791, amounting to 28,268,000 florins, and at the end of the year the number of loans outstanding was 46,330 amounting to 53,000,000 florins. The total assets of the banks amounted to 213,946,000 florins, and the profits of the year were 435,000 florins.

As the following table will show, the Raiffeisen banks have never previously had at their disposal such large resources nor made loans to so large an amount. It will also be seen that the average size of the loans granted has been steadily increasing since 1914, a fact sufficiently explained by the general rise in prices.

Work of the Raiffeisen banks from 1908 to 1918.

	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918
Number of existing banks	578	603	643	741	835	886	928	955	1,024	1,067	1,115
Number of banks which furnished returns	437	582	636	733	830	883	926	953	1,016	1,061	1,105
Number of deposits received . .	44,784	62,426	76,939	92,662	110,078	133,359	122,279	150,987	167,962	180,979	165,335
Amount in thousands of florins of deposits received	13,460	19,167	21,956	27,782	33,779	38,158	34,954	56,572	82,714	99,713	135,728
Number of withdrawals	19,985	32,122	37,900	48,180	60,658	72,920	80,141	72,734	83,921	88,580	84,626
Amount in thousands of florins, interest included, of withdrawals .	9,420	14,737	17,693	21,576	27,623	32,316	32,255	33,620	54,326	67,301	92,819
Number of loans granted	6,624	8,372	10,012	11,683	14,591	15,696	12,061	10,384	10,989	11,519	9,791
Amount in thousands of florins, of loans granted	5,039	6,370	8,442	10,288	12,725	15,817	12,022	11,835	17,739	20,064	28,268
Number of deposits at the close of the year	41,386	60,148	72,338	84,758	99,152	112,976	126,630	145,723	167,115	190,180	216,559
Amount in thousands of florins of deposits at the close of the year	16,385	24,890	30,334	37,561	44,902	52,183	56,599	81,674	113,043	149,080	196,842
Number of loans outstanding at the close of the year	14,390	21,511	25,163	29,576	35,983	41,704	44,133	43,436	43,229	44,497	46,330
Amount of loans outstanding at the close of the year in thousands of florins	9,136	13,508	16,812	20,329	25,145	31,381	33,127	33,260	37,472	42,306	53,000
Assets in thousands of florins . .	18,248	26,966	33,523	41,486	50,411	59,862	64,692	89,180	122,428	161,550	213,946
Profits in thousands of florins . .	72	108	133	155	179	214	258	136	444	376	435

Part II: Insurance and Thrift

MISCELLANEOUS INFORMATION RELATING TO INSURANCE AND THRIFT.

CANADA.

MUNICIPAL HAIL, INSURANCE, IN ALBERTA. — FINANCIAL STATEMENT OF THE
HAIL INSURANCE BOARD OF ALBERTA: BUSINESS OF 1919, FROM MARCH 11TH, 1919,
TO JANUARY 31ST, 1920. Calgary, 1920.

Under the Municipal Hail Insurance Act, 1918, of the Province of Alberta (1) a hail insurance district was formed consisting of 67 municipal districts of the province which, at the elections held in February 1919, approved the adoption of the Act.

The total assessable area of the Hail Insurance District (partly estimated) is 11,662,092 acres. Of this total acreage nearly 19 per cent. was insured in 1919 under the municipal plan the percentage varying in the different municipal districts from 1 ½ per cent. to 40 per cent. There is no record of what percentage of the assessable area was actually under crop, but it was probably from 30 to 35 per cent. If this estimate is correct, it means that over 50 per cent. of the total area in crop in the Hail Insurance District was insured under the Act.

The total acreage insured at the beginning of the season within the Hail Insurance District was 2,074,533 acres. Outside the District applications were received from 743 farmers in forty municipal districts for insurance on 105,985 acres. Owing to adverse crop conditions, particularly in the southern and eastern portions of the province, 571,204 acres were withdrawn under the provision allowing withdrawal if crops were destroyed by any other cause than hail. This left a net insurance of 1,609,314 acres that was carried throughout the season.

The total assessment was \$ 747,929.27 inside and \$ 40,833.52 outside the Hail Insurance District.

Taking into consideration the risk on the acreage withdrawn, it is estimated that the total risk carried during the season was approximately \$ 13,300,000. Of the total risk carried about 94 ½ per cent. was at \$ 8 per acre and 5 ½ per cent. at \$ 6 per acre, the percentage of insurance at \$ 6 being slightly larger outside than inside the Hail Insurance District.

The plan appealed to the large and small farmer alike. The largest

(1) See our issue of January-February 1919

insurer had 9,267 acres insured and paid a premium of \$ 4,150.36. The smallest had $1 \frac{1}{4}$ acres insured and paid a premium of 60 cents. The former did not receive any damage by hail. The latter was damaged to the extent of 20 per cent. and received an award of \$ 2.

In arranging for the adjustment of losses it was decided to divide the whole area into four districts, placing each district in charge of a superintendent who had charge of all the adjustments in that district. Each superintendent was regularly assisted by two or three men and further assistance was arranged for as was found necessary.

There were 1,960 claims from farmers inside the Hail Insurance District and 99 claims from farmers outside the District, making a total of 2,059 claimers. Of these claims only five were appealed. The average time for the inspection of claims was less than nine days after the storm. The average time for the first payment was less than fourteen days after the adjustment. At the end of the year there was not a single claim outstanding or unsettled.

The number of acres damaged was 188,708 inside and 9,531 outside the Hail Insurance District, making a total of 198,239 acres damaged. The total losses amounted to \$ 503,957.78, equal to about 4 per cent. of the total amount of insurance carried. Of these losses, \$ 473,267.80 occurred inside and \$ 30,689.80 outside the Insurance District. The largest amount of loss in any one municipal district was \$ 77,904.59. The next largest loss was \$ 64,303.85. The largest individual loss was \$ 7,750, the farmer who suffered this loss had paid hail taxes amounting to \$ 1,355.04. The smallest individual loss was \$ 1.68.

It was thought by many persons that the municipal insurance plan would be approved only in districts subject to hail and that, therefore, the cost would be abnormally high. If this contention were true, then it would follow that the cost of hail insurance within the Hail Insurance District would be higher than in places outside. This, however, did not prove to be the case, as the losses inside the District were 63 % of the total assessment, while outside the District they were 75 %, although the insurance carried outside the Insurance District was scattered over forty municipal districts and for that reason would ordinarily be considered a very safe risk.

In fixing the rate to be charged on lands withdrawn on account of crops being destroyed otherwise than by hail, the Board tried to fix the rate as low as possible consistent with the amount of risk incurred. Crops which were withdrawn previous to 2 June were charged 3 cents and 4 cents per acre respectively for insurance at \$ 6 and \$ 8 per acre. From then up to 20 July, the last date on which withdrawals could be made there were three weeks and the rates were fixed at 3 cents and 4 cents per week according to the amount of insurance per acre. These rates are very much lower than those charged by the insurance companies on lands withdrawn on similar dates, and it may be that they were too low, but because the failure of crop which made the withdrawal necessary also made it difficult for the farmer to pay any tax, the Board decided to set the rates as they did.

The following table shows the income and profit and loss account of the Hail Insurance Board from 11 March 1919 to 31 January 1920 :

*Income and Profit and Loss Account
for the Period from 11 March 1919 to 31 January 1920.*

RECEIPTS.		EXPENDITURE	
Assessment :		Claims :	
	\$		
Municipal Districts, Inside		Municipal Districts, Inside	
Hail Insurance District . .	747,929.27	Hail Insurance District . .	473,267.80
		Municipal Districts, Outside	
Municipal Districts, Outside		Hail Insurance District . .	30,689.98
Hail Insurance District . .	40,833.52		503,957.78
	788,762.79	Claims Adjustment Fees . . .	21,064.55
Deduct: Rebates on Soldiers'		Commission to Municipal Di-	
Lands	10,630.31	stricts on Collections . . .	16,815.14
	778,132.48	Salaries	10,622.63
Interest from Municipal Di-		Other general expenses . . .	16,276.34
stricts	922.03	Expenses of Introducing the	
		Act	3,500 00
		Interest, etc., paid to Bank. .	8,230.35
		Discount allowed Municipal Di-	
		stricts	229.49
		TOTAL EXPENDITURE	580,696.28
		Surplus	198,358.23
TOTAL RECEIPTS	779,054.51		779,054.51

Of the total surplus of \$ 198,358.23 a sum of \$ 100,000 was set aside as a reserve fund.

The expenses of the municipal districts in connection with hail insurance are paid by the Hail Insurance Board direct to the councils at the following rates : to municipal districts in the Hail Insurance District the sum of \$ 10 per township for expenses and a commission of 2 per cent. of the net assessment ; to municipal districts outside the Insurance District a commission of 5 per cent. with no allowance for expenses. Interest at the rate of 5 per cent. is allowed on amounts paid by municipal districts before the due date.

To carry on the business of the district during the year the Hail Insurance Board borrowed from the Bank the sum of \$ 450,000 and the interest on these loans amounted to \$ 8,222.43. When banking arrangements were being made, it was found that at least three of the large banks were prepared to handle the account and to advance the large amount of credit necessary to carry on the business.

Hail taxes are due from the rate-payers to the municipal district on or before 15 December, and the whole assessment of each municipal district is not due to the Board until 31 December. It was feared that on account of the bad crop conditions in some parts and because it was the first year of operations that collections might be somewhat slow. It was

found, however, that before the end of the year over \$ 200,000 of the assessment had been received and on 6 January the indebtedness to the Bank had been repaid in full.

The Hail Insurance Board was requested by several managers of banks to agree to some assignment of hail insurance indemnity whereby the bank lending money to a farmer might be protected to the extent of the award in case the farmer sustained a loss by hail. The Board decided to recommend a form giving the bank a power of attorney to receive the award in such cases. Under this provision 68 powers of attorney were filed by the local managers of five different banks. Losses by hail were sustained in 11 of these cases and the total sum of \$ 4,180.61 was paid direct to the banks under the authority of the powers of attorney filed. The Board believes that this plan provides as good security as can be provided under the circumstances.

Apart from the hail insurance carried by the Hail Insurance Board risks amounting to about \$ 9,300,000 were carried by insurance companies. The companies paid out in losses about \$ 353,000.

PORTUGAL. *

THE ORGANIZATION OF OFFICIAL STATISTICS OF AGRICULTURAL INSURANCE.
— *Jornal de Seguros*. Lisbon, 28 February 1921.

By decree No. 7,319, dated 16 February 1921, it was provided that the General Office of Agricultural Economy and Agricultural Statistics, should organize the statistics of agricultural insurance against the various risks to which agricultural produce, live stock, machines and implements are exposed.

All the insurance companies which extend their business to the various branches of agriculture and stock farming are obliged to furnish annually to the office named all details necessary for the elaboration of the statistics in question.

Agricultural insurance may comprise :

- (a) cereals and vegetables from the time of sowing until they are stored ;
- (b) pasture-land and stubble ;
- (c) straw and hay in stacks ;
- (d) olive trees, pine trees, cork-oak trees and other forest trees ;
- (e) wood cut in forests, piled or spread out ;
- (f) woods not cut ;
- (g) threshing machines, motors and agricultural implements.

Live stock insurance will include the various kind of animals, whatever may be their economic use, and the system under which they live.

The insurance companies must write in special schedules the particulars entered in the compulsory register of their policies, with the exception of the name, signature or denomination of the persons or societies insured, and the insurance premiums. The losses and the respective compensations must be shown in another schedule.

The insurance must be shown separately for every object insured.

In the case of companies which undertake insurance for various risks a distinct schedule must be sent for each.

The various schedules must be transmitted within a fixed period to the General Office of Agricultural Economy and Agricultural Statistics.

SWEDEN.

THE DEVELOPMENT OF LIVE STOCK INSURANCE FROM 1895 TO 1916. — STATISTISK ÅRSBOK FÖR SVERIGE (*Statistical Year Book of Sweden*), Year 1920. Stockholm, 1921.

In Sweden the insurance against mortality amongst live stock shows continual progress from 1895 to 1916 as shown in the two tables given below :

TABLE I. — *Development of Horse Insurance.*

Year	Number of horses insured	Value insured	Number of losses	Compensation paid
		crowns		crowns
1895	146,550	51,777,256	3,304	846,210
1900	198,991	76,284,089	4,577	1,310,125
1905	311,030	121,879,749	7,841	2,114,279
1910	343,768	141,604,616	9,612	2,593,983
1914	382,591	160,055,141	11,859	3,180,654
1915	393,553	172,302,864	11,018	3,090,461
1916	412,969	218,013,492	10,618	3,072,032

TABLE II. — *Development of Cattle Insurance.*

Year	Number of head of cattle insured	Value insured	Number of losses	Compensation paid
		crowns		crowns
1895	30,144	3,591,485	644	61,716
1900	123,401	14,719,307	701	64,593
1905	322,929	69,973,639	2,039	205,583
1910	337,867	74,820,839	2,954	336,190
1914	513,468	130,630,646	2,805	356,709
1915	541,442	138,186,985	2,701	335,188
1916	562,916	150,682,854	1,702	250,864

In 1916 there were in Sweden 701,099 horses and 2,913,159 head of cattle. In that year, therefore, more than half the number of horses was insured. The insurance of cattle was not so general, as only 19.3 per cent of the cattle were insured.

Part III: Credit

MISCELLANEOUS INFORMATION RELATING TO CREDIT.

ARGENTINA.

1. THE PROVINCIAL BANK OF BUENOS AIRES IN 1920. *La Nación* Buenos Aires, 11 February 1921.

From the report published by the Directors of the Provincial Bank of Buenos Aires we give some particulars of the work of this institution for the year 1920.

The following table which shows the increase of general deposits, includes deposits in gold, the amount of which has been converted into legal currency :

Years	Pesos	Years	Pesos
1914	107,450,000	1918	275,000,000
1915	132,614,000	1919	303,300,000
1916	171,149,000	1920	321,856,000
1917	215,710,000		

As shown above the deposits increased by 214,406,000 ps. between 31 December 1914 and 31 December 1920.

The bills discounted, the loans and the advances on current account increased as follows :

Years	Pesos	Years	Pesos
1914	129,000,000	1918	226,000,000
1915	146,000,000	1919	252,000,000
1916	168,000,000	1920	285,240,000
1917	188,000,000		

From 1914 to 1920 the total increase was 156,240,000 pesos.

In the above figures are included the loans secured on produce of various kinds derived from stock farming and from agriculture. The loan transactions were more numerous in this year than in the year before, loans having been made in the branch banks to the value of 8,044,000 ps. and in the central bank at Buenos Aires to the value of the 40,038,000 ps. making a total of 48,082,000 ps.

On 31 December 1914 the cash in hand in legal currency and in converted gold amounted to 26,597,000 ps., and on 31 December 1920 to 101,700,000 ps., an increase of 75,103,000 ps.

Compared with the balance sheet for 1919 we find in the branch banks an increase of nearly 6,000,000 ps. in the deposits, 18,000,000 ps. in the bills in hand and 5,000,000 ps. in the cash in hand.

The branches now working are 65 in number; there are four agencies in the Federal Capital and one at Berisso.

The mortgage loans during 1920 amounted to 7,837,410 ps. of which 6,676,410 ps. were in cash, and 161,000 ps. in mortgage bonds, while the sums received as instalments of repayment or complete repayments amounted to 4,382,520.50 ps, of which 3,034,620.50 ps. was in cash and 1,347,800 ps. in bonds.

* * *

2 THE "BANCO EL HOGAR ARGENTINO" IN 1919-1920. — *Monitor de sociedades anónimas y patentes de invención*, No. 183 Buenos Aires, January 1921.

As shown in the Directors' Report of the *Banco el Hogar Argentino* for its 21st working year (1919-20), the mortgage loans and promises to sell amounted to 65,196,661.55 pesos, and the *certificados de participación* representing the fund serving for the amortization of loans and promises to sell to 13,725,851.96 ps. This gives a net increase of 51,470,980.50 pesos.

The item "real property of the Bank" gives a total of 32,697,758.41 pesos of which 1,635,807.91 ps. represents the value of the offices of the Bank, and 31,061,950.50 ps. that of houses, fields and lands owned by the Bank.

The value of the property is thus distributed according to the locality in which it was situated: in the Federal Capital, 16,835,733.03 ps., in the province of Buenos Aires 11,328,053.51 ps., in the province of Santa Fé 1,293,929.23 ps. and 1,604,194.73 ps. in the province of Cordoba.

DENMARK.

STATE LOANS FOR THE FORMATION OF SMALL HOLDINGS. — *STATISTISK ÅRBOG 1920 UDGIVET AF DET STATISTISKE DEPARTEMENT (Statistical Year Book for the Year 1920, published by the Statistical Department)*. Copenhagen, 1921.

In conformity with the laws of 1899, 1904 and 1909 the State may lend, for the formation of small holdings, up to 90 per cent. of the value of the property. For the first five years the borrower pays only the interest at the rate of 3 per cent. After that time he pays annuity charges equal to 4 per cent. of the sum borrowed, these charges including interest at 3 per cent. on the outstanding loans together with an instalment of repayment. The loan will thereby be entirely repaid in 98 years.

From 1 April 1919 to 31 March 1920, 1,311,386 crowns were lent for

the formation of 150 small holdings, and 1,145,673 crowns were lent to 58 small cultivators who had already received loans. These figures are lower than those of the preceding years.

	Number of new borrowers	Amount of the loans	Number of supple- mentary loans	Amount supplemen- tary loans
	crowns		crowns	
From 1 April 1919 to 31 March 1920 . .	150	1,311,386	589	1,145,673
From 1 April 1918 to 31 March 1919. .	225	1,934,472	684	1,349,710
From 1 April 1917 to 31 March 1918. .	274	2,117,545	415	530,061
From 1 April 1916 to 31 March 1917 . .	415	3,192,087	601	888,474

From 1900 to 1920, 9,264 small holdings were formed, by means of loans of 49,836,183 crowns, and 5,332 supplementary loans amounting to 8,156,077 crowns were granted.

NORWAY.

MORTGAGE CREDIT IN 1918. — STATISTISK AARBOK FOR KONGERIKET NORGE (*Statistica Year Book of Norway*). Year 1919. Christiania, 1920.

There is in Norway a State Mortgage Bank, the capital of which is furnished by the State. The transactions of this banks for the year 1918, to which we add for purposes of comparison, the transactions of the two previous years, are shown in the following table :

TABLE I. — *Transactions of the Mortgage Bank from 1916 to 1918.*

		1916	1917	1918
Applications for loans	Number	1,466	4,883	3,582
	Amount	7,500,000	36,870,000	31,471,800
Amount of loans granted		9,446,100	27,903,400	8,873,000
Amount (included in the above figures) of loans granted in rural districts		8,630,900	24,041,200	7,522,300
Sums repaid		5,358,875	6,061,281	6,342,705
Loans outstanding on 31 December		204,613,148	226,457,202	228,999,929

Besides the Mortgage Bank, the Norwegian Bank for Agricultural Holdings and Workmen's Dwellings granted up the end of 1916 numerous mortgage loans on small holdings. Although this establishment has for some time refused to grant new loans, those still outstanding amounted in 1917-1918 to 43,565,909 crowns, of which 26,567,055 were on land and the rest on dwellings.

It may be added that since the foundation of the bank in 1903, it granted in all 19,222 loans on land, amounting to 29,020,480 crowns, and 14,445 loans on dwellings, amounting to 21,293,857 crowns.

The operations carried on by this bank are now in the province of the Norwegian Bank of Small Holdings and Dwellings which began business on 1 January 1917. Its balance sheet already shows important figures as will be seen in the following table :

TABLE II. — *Operations of the Norwegian Bank of Small Holdings and Dwellings in 1916-17 and 1917-18.*

		1916-1917	1917-1918
		crowns	crowns
Applications for loans on land . . .	Number	706	3,245
	Amount	2,135,747	9,235,471
Applications for loans on dwellings	Number	501	1,861
	Amount	1,269,590	4,662,452
Amount of loans granted	On land	133,600	4,391,950
	On dwellings	108,350	2,436,000
Repayment		—	19,220
Loans outstanding at the end of the year		241,950	7,190,693
Including	Loans on land	133,600	4,506,330
	Loans on dwellings guaranteed by the commune	108,350	2,500,713
	Loan on dwellings without guarantee.	—	26,650
	Loans to communes for the purchase of small holdings	—	57,000
	Loans to communes for the purchase of dwellings	—	100,000

The loans granted by the large mortgage companies are shown the following table :

TABLE III. — *Loans Granted by Mortgage Companies from 1914 to 1918.*

Societies	Loans				
	1914	1915	1916	1917	1918
	1000 crowns	1000 crowns	1000 crowns	1000 crowns	1000 crowns
1. De Forenede norske Kreditforeninger	3,472	4,298	4,810	5,317	5,497
2. Den norske Hypotekforening for den prioritets panteleen	311	599	787	969	1,032
3. Norges Kreditforening for Lond-og Skogbruk	—	—	2,243	5,518	8,770
4. Den vesten-og nordentjeldske skibshypotekforening	1,688	1,793	1,607	1,618	1,466
Total	5,471	6,690	9,447	13,422	16,765

SWEDEN.

RURAL MORTGAGE CREDIT IN 1917. — STATISTISK ÅRSBOK FÖR SVERIGE (*Statistical Year Book of Sweden*) Year 1920. Stockholm 1920.

The registration, renewal, and cancellation of mortgages in the country districts of Sweden is shown by the following figures :

	1913	1914	1915	1916	1917
	Crowns	Crowns	Crowns	Crowns	Crowns
Mortgages registered	159,517,126	163,423,326	149,162,179	152,387,411	308,900,000
» renewed	150,403,856	166,268,213	203,684,022	197,585,634	273,000,000
» cancelled	54,212,610	47,287,397	45,355,197	44,056,181	57,200,000

The figures for 1916 and 1917 are not final. The same is true of the sum of 2,744,300,000 crowns which would represent the total mortgage debt in country districts at the end of 1917. This total reached 574,603,530 crowns in 1870 ; 795,691,445 crowns in 1880 ; 977,629,214 crowns in 1890 ; 1,193,540,696, crowns in 1900 ; 2,002,260,391 crowns in 1910 and 2,449,321,136 crowns in 1915.

Part IV : Miscellaneous Questions relating to Agricultural Economy

I. — ECONOMIC AND SOCIAL CONDITIONS OF THE AGRICULTURAL CLASSES

NORWAY.

THE WAGES OF AGRICULTURAL LABOURERS FROM 1915-16 TO 1919-20.

SOURCE:

KROSBY (Nils): Albeitalønnen i jordbruket, Driftsaarene 1915-16—1919-20 (*Agricultural Wages from 1915-16 to 1919-20*). Communications of the Society for the Welfare of Norway. Inquiries into the progress of agriculture. Christiania, 1920.

We reproduce the principal part of the report of Mr. Nils Krosby on agricultural wages from 1915-16 to 1919-20.

In the *Tidsskrift for det norske landbruk* (*Journal of Norwegian Agriculture*), year 1919, p. 426 et seq. are published the chief particulars collected as to the wages of agricultural labourers in Norway during the years 1915-16 to 1918-19. The summer half year 1919 together with the winter half year of 1919-20 are called the year 1919-20. The years 1915-16 to 1918-19 are similarly calculated.

§ 1. YEARLY MONEY WAGES OF AGRICULTURAL LABOURERS.

Table I (page 213) shows the yearly money wages of agricultural labourers, apart from food, lodging and payments in kind.

The highest wages for men were paid in 1919-20 in Akershus, after which comes Telemark; the lowest were paid in Møre and the next lowest in Nordland.

The highest wages for women were paid in 1919-20 in Buskerud, after which comes Vestfold; the lowest were paid in Nordland and the next lowest in Troms.

The greatest increase for men between 1918-19 and 1919-20 was

TABLE I. — *Average for the Whole Country
of the Yearly Money Wages of Agricultural Labourers.*

Besides food and lodging, the following wages were paid in money	Men			Women		
	Whole year	Summer half year	Winter half year	Wole year	Summer half year	Winter half year
	crowns	crowns	crowns	crowns	crowns	crowns
Year 1915/16	391	242	159	202	120	91
» 1916/17	511	310	224	249	144	113
» 1917/18	691	423	307	328	192	153
» 1918/19	963	583	431	450	263	214
» 1919/20	1,201	730	529	613	348	288
	cr. | %	cr. | %	cr. | %	cr. | %	cr. | %	cr. | %
Increase 1915/16—1916/17 .	120 | 31	68 | 28	65 | 41	47 | 23	24 | 20	22 | 24
» 1916/17—1917/18 .	183 | 36	113 | 36	83 | 37	79 | 32	48 | 33	40 | 35
» 1917/18—1918/19 .	269 | 39	160 | 38	124 | 40	122 | 37	71 | 37	61 | 40
» 1918/19—1919/20 .	238 | 24	147 | 25	98 | 23	163 | 36	85 | 32	74 | 35
Increase 1915/16—1919/20 .	810 | 207	488 | 202	370 | 233	411 | 203	228 | 190	197 | 216

in Ostfold, where it amounted to 37 per cent.; next comes Buskerud with 36 per cent.; the smallest increase was in Vest-Agder (14 per cent.), and next smallest in Hordaland (16 per cent.).

Between 1915-16 and 1919-20 the greatest increase was in Oppland (257 per cent.) followed by Sogn and Fjordane (242 per cent.); the smallest increase was in Nordland (163 per cent.) and the next lowest in Sør-Trøndelag (181 per cent.).

The greatest increase in women's wages between 1918-19 and 1919-20 was in Oppland (59 per cent), followed by Ostfold (50 per cent); on the other hand there was a diminution in Finnmark, while in Nordland and Sør-Trøndelag there was an increase of only 26 per cent.

From 1915-16 to 1919-20 the greatest increase was in Finnmark (249 per cent.) after which comes Oppland (231 per cent.); the smallest increase was in Sør-Trøndelag (172 per cent.) and the next smallest in Nordland (175 per cent.).

To facilitate a comparison, it may be remarked that the Central Office of Statistics (*Official Statistics of Norway*, VI, 93, p. 2) gives 29 per cent. for men and 30 per cent. for women, as the increase of annual wages between 1910 and 1915, a percentage calculated on yearly wages for 1910 and 1915 of 291 and 374 crowns respectively for men, and 148 and 193 crowns for women.

§ 2. DAILY WAGES DURING THE SUMMER HALF YEAR
FOR LABOURERS BOARDED BY THEIR EMPLOYER.

Without taking into account the wages paid to women during the grain harvest of 1918-19, it appears that the maximum of daily wages whether for men or women, was reached in the time of the hay harvest during the five years under review, and the minimum at ordinary times.

For men during the hay harvest the highest daily wages in all the five years were paid in Finmark in 1919-20 and the next highest in Rogaland in the same year; the lowest were paid in Ostfold (1919-20), the next lowest being paid in Sogn and Fjordane.

For men, exclusive of the harvest time, the highest daily wages for the five years were recorded in Finmark in 1919-20, and the next highest in Rogaland; the lowest in Sør-Trøndelag (1919-20) and the next lowest in Nord-Trøndelag.

For women during the hay harvest the highest daily wages were paid in 1919-20 in Finmark and the next highest in Vestfold; the lowest in Nordland and the next lowest in Aust-Agder.

For women, exclusive of the harvest time, the maximum daily pay was in Finmark and the next highest in Vestfold; the lowest in Nordland and the next lowest in Troms.

The increase of daily pay between 1918-19 and 1919-20 reached the maximum for men during the hay harvest in Akershus (32 per cent.) followed by Opland (29 per cent.); the smallest increase was in Aust-Agder (6 per cent.) and the next smallest in Vest-Agder (8 per cent.).

Between 1915-1916 to 1919-20 the maximum increase was in Opland (253 per cent.) followed by Akershus (235 per cent.); the lowest was in Vest-Agder (174 per cent.) and the next lowest in Ostfold (186 per cent.).

The increase in the daily pay for men, exclusive of harvest time, was highest between 1918-19 and 1919-20 in Akershus (32 per cent.), followed by Opland and More (25 per cent.); it was lowest in Vest-Agder (4 per cent.), and next lowest in Aust-Agder (6 per cent.).

Between 1915-16 to 1919-20 the increase was highest in Akershus (265 per cent.), followed by Opland (262 per cent.); it was lowest in Vest-Agder (174 per cent.) and next lowest in Vestfold, Møre, and Sør-Trøndelag (192 per cent.).

The increase in the daily pay for women between 1918-19 and 1919-20 was highest in Nord-Trøndelag (39 per cent.), followed by Opland (34 per cent.); it was lowest in Aust-Agder (12 per cent.) and next lowest in Buskerud (15 per cent.).

Between 1915-16 and 1919-20 the greatest increase was in Akershus (241 per cent.) next to which came Opland (240 per cent.); the lowest was in Vest-Agder (175 per cent.) and the next lowest in Aust-Agder (186 per cent.).

The increase in the daily pay for women, exclusive of harvest-time, between 1918-19 and 1919-20 was highest in Ostfold (45 per cent.), next to which came Finmark (40 per cent.); it was lowest in Vest-

TABLE II. — *Average for the Whole Country of Daily Wages during the Summer Half Year of Labourers Boarded by their Employer.*

	Men					Women				
	During Spring work	Hay harvest	Grain harvest	Exclusive of harvest	During Spring work	Hay harvest	Grain harvest	Exclusive of harvest		
	crowns	crowns	crowns	crowns	crowns	crowns	crowns	crowns		
Year 1915/16	2.51	2.95	2.49	2.37	1.30	1.53	1.42	1.18		
“ 1916/17	3.33	3.89	3.35	3.19	1.71	1.95	1.85	1.57		
“ 1917/18	4.80	5.60	4.85	4.50	2.39	2.73	2.65	2.18		
“ 1918/19	6.64	7.41	6.73	6.13	3.32	3.78	3.86	3.09		
“ 1919/20	7.88	9.—	7.78	7.32	4.17	4.68	4.43	3.72		
Increase 1915/16–1916/17	0.82	33	0.86	35	0.41	0.42	0.43	0.39	33	
“ 1916/17–1917/18	1.47	44	1.50	45	0.68	0.78	0.80	0.61	39	
“ 1917/18–1918/19	1.84	38	1.88	39	0.93	1.05	1.21	0.91	42	
“ 1918/19–1919/20	1.24	19	1.05	16	0.85	0.90	0.57	0.63	20	
Increase 1915/16–1919/20	5.37	214	6.05	205	2.87	3.15	3.01	2.54	215	

TABLE III. — *Average for the Whole Country of Daily Wages during the Summer Half Year of Labourers who Provide their own Food.*

	Men					Women				
	During Spring work	Hay harvest	Grain harvest	Exclusive of harvest		During Spring work	Hay harvest	Grain harvest	Exclusive of harvest	
	crowns	crowns	crowns	crowns		crowns	crowns	crowns	crowns	
Year 1915/16	3.64	4.00	3.64	3.32		2.12	2.35	2.22	2.00	
» 1916/17	4.95	5.44	4.97	4.83		2.76	2.96	2.86	2.65	
» 1917/18	7.13	7.86	7.27	6.87		3.93	4.21	4.17	3.66	
» 1918/19	9.66	10.27	9.83	9.26		5.43	5.92	6.02	5.20	
» 1919/20	11.55	12.42	11.41	10.96		6.53	7.06	6.81	6.10	
Increase 1915/16-1916/17 .	1.31	1.44	1.33	1.51	%	0.64	0.61	0.64	0.65	%
» 1916/17-1917/18 .	2.18	2.42	2.30	2.04	%	1.17	1.25	1.31	1.01	%
» 1917/18-1918/19 .	2.53	2.41	2.56	2.39	%	1.50	1.71	1.85	1.54	%
» 1918/19-1919/20 .	1.89	2.15	2.58	1.70	%	1.10	1.14	0.79	0.90	%
Increase 1915/16-1919/20 .	7.91	8.42	7.77	7.64	%	4.41	4.71	4.59	4.10	%

Agder (9 per cent.) and next lowest in Buskerud and Telemark (11 per cent.).

Between 1915-16 and 1919-20, the highest increase was in Ostfold (266 per cent.), followed by Akershus (263 per cent.); the lowest was in Sogn and Fjordane (183 per cent.) and the next lowest in Aust-Agder (188 per cent.).

§ 3. DAILY WAGES DURING THE SUMMER HALF YEAR
OF LABOURERS WHO PROVIDE THEIR OWN FOOD.

As between the different districts the proportions are similar to those shown in the case of labourers receiving food from their employer.

TABLE IV. — *Average for the Whole Country of Daily Wages during the Winter Half Year for Field Work.*

	Labourers boarded by their employers		Labourers providing their own food					
	Men	Women	Men	Women				
	crowns	crowns	crowns	crowns				
Year 1915/16.	1.81	1.02	3.08	1.84				
» 1916/17.	2.71	1.34	4.53	2.41				
» 1917/18.	3.86	1.87	6.20	3.33				
» 1918/19.	5.31	2.63	8.40	4.67				
» 1919/20.	6.14	3.17	9.61	5.41				
	crowns	%	crowns	%	crowns	%	crowns	%
Increase 1915/16-1916/17	0.90	50	0.32	31	1.45	47	0.57	31
» 1916/17-1917/18	1.15	42	0.53	40	1.67	37	0.92	38
» 1917/18-1918/19	1.45	38	0.76	41	2.20	35	1.34	40
» 1918/19-1919/20	0.83	16	0.54	21	1.21	14	0.74	16
Increase 1915/16-1919/20	4.33	239	2.15	211	6.53	212	3.57	194

Men receiving food from their employers received the highest pay per day for the six winter months of the year 1919-20 in Finnmark and the next highest in Hordeland; the lowest in Ostfold, Sogn, Fjordane and the next lowest in Sør-Trøndelag.

Women boarded by their employers received the highest pay per day for the six winter months of the year 1919-20 in Finnmark and next highest in Akershus; the lowest in Nordland and the next lowest in Hedmark.

The greatest increase of daily pay for men boarded by their employers during the winter half year between 1918-19 and 1919-20 was in Finmark (70 per cent.), and the next highest in Opland (27 per cent.); there was a diminution in Hedmark of 1 per cent., and an increase in Ostfold of 1 per cent.

Between 1915-16 and 1919-20 the increase was highest in Opland (272 per cent) and next highest in Akershus and Nord Trøndelag (231 per cent); the lowest was in Sogn and Fjordane (178 per cent.), and the next lowest in Finmark (179 per cent.).

The increase between 1918-19 of daily pay in the winter half year for women and 1919-20 boarded by their employers was highest in Finmark (117 per cent.) followed by Akershus (45 per cent.); there was a diminution of 4 per cent. in Hedmark, and an increase in Aust-Agder and Møre of 11 per cent.

Between 1915-16 and 1919-20 the increase was highest in Akershus (336 per cent.) and next highest in Finmark (280 per cent.); it was lowest in Aust Agder (163 per cent.) and next lowest in Møre (164 per cent.).

The amount of wages during the winter half year and the increase of the daily pay for labourers providing their own food show figures differing somewhat in the various districts from those relating to labourers boarded by their employers.

MISCELLANEOUS INFORMATION RELATING TO THE ECONOMIC AND SOCIAL CONDITIONS OF THE AGRICULTURAL CLASSES.

DENMARK.

1. THE INCREASE OF AGRICULTURAL EARNINGS FROM 1915 TO 1918 — STATISTISK AARBOG 1920 UDGIVET AF DET STATISTISKE DEPARTMENT (*Statistical Year Book 1920, published by the Statistical Department*). Copenhagen, 1921.

In order to estimate agricultural earnings as exactly as possible it is necessary to distinguish between servants, men and women, boarded by the farmer and the male day labourers who have to provide their own food. On the other hand, the wages paid in the Danish islands being decidedly lower than those of Jutland, we give both, adding however the general average for the whole of Denmark.

TABLE I. — *Average Yearly Earnings of Servants.*

		Men				Women			
		Summer	Winter	Board	Total	Summer	Winter	Board	Total
		cr.	cr.	cr.	cr.	cr.	cr.	cr.	cr.
Islands	1918	413	203	628	1,244	187	151	542	880
	1915	264	157	350	771	141	121	306	568
	1910	216	128	265	609	120	102	232	454
Jutland	1918	460	219	664	1,343	219	136	553	908
	1915	304	154	359	817	164	102	303	569
	1910	257	123	264	644	135	83	228	446
The whole of Denmark	1918	438	211	647	1,296	204	142	548	894
	1915	285	156	354	795	153	111	305	569
	1910	239	125	263	627	129	91	229	449

TABLE II. — *Average Yearly Wages of Male Day-labourers.*

		Wages per day			Average annual wages
		Spring and Summer	Autumn	Winter	
		crowns	crowns	crowns	crowns
Island	1918	4.37	5.26	3.46	1,300
	1915	2.65	3.17	2.10	770
	1910	2.08	2.64	1.72	630
Jutlands	1918	5.30	5.92	3.72	1,480
	1915	3.22	3.56	2.29	890
	1910	2.60	2.97	1.78	720
The whole of Denmark	1918	4.84	5.59	3.59	1,400
	1915	2.94	3.36	2.19	830
	1910	2.34	2.80	1.75	680

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2. AGRICULTURAL AND HORTICULTURAL LABOURERS' UNIONS IN 1919. — STATISTISK AARBOG 1920, UDGIVET AF DET STATISTISKE DEPARTEMENT (*Statistical Year Book 1920, published by the Statistical Department*). Copenhagen, 1921.

In 1919, there were in Denmark 640 agricultural labourers' unions, with 32,000 members (compared with 30,000 members in 1918) and 21 horticultural labourers' unions with 1,998 members (compared with

1,360 in 1918). The benefits granted by the first amount to 1,610,309 crowns (compared with 1,334,329 crowns in 1918) of which 1,565,301 crowns were granted by the unemployment fund, and 45,008 crowns for those who were sick or injured. The benefits granted by the horticultural labourers unions amounted to 145,564 crowns (compared with 37,466 crowns in 1918), of which 145,486 crowns were for unemployment benefits, and 72 crowns for allowances to sick and injured.

FRANCE.

1. AN ENQUIRY INTO RURAL DEPOPULATION. — *Chronique sociale de France*. Lyon, February 1920

La France Rurale, a weekly agricultural newspaper, opened an inquiry among its readers as to the reasons for the desertion of the country districts. Many replies were received which led to an unforeseen conclusion, viz, that in the greater number of districts which sent replies, the peasant could not obtain land to cultivate.

Only one reader said that every peasant who wished to buy land could do so, and had done so, those who had been mobilized as well as those who had remained in the country. "Both," he said, "were forced to buy; landowners who did not work the land, sold it to invest the money at 5 or 6 per cent.; there were no buyers except the farmers." We must believe that in the rural commune from which he wrote there was land for all who desired it, for he mentions a small property lying uncultivated for two years, and also a farm for sale. It is true that this last is annexed to a country house, which perhaps deterred purchasers.

But this reader is absolutely alone in his opinion. All the others complain that they cannot obtain the land which they desire.

One writes: "For six months, from Lyons to Bourgoin and from Lyons to Villefranche, I have been looking for a rural property of from four to six hectares to cultivate. I have found nothing and unfortunately I am not only one. I know quite a number of others in the same predicament. Neither for cultivation on a large scale nor yet for market gardening can I find anything. I have advertised in several papers. Nothing."

Another writes from the mountainous district of the Rhône:

"I am in a fair way to exchange with MM. X. and Y. on the basis of equal land value (all that I could dream of obtaining) and I am moreover anxious not to offend them. Meantime as soon as there is a little land for sale (a rare circumstance here) these gentlemen hasten to lay hands upon it to add it to their game preserves; having two gamekeepers they must give them plenty of work. They are absolutely within their rights even should they buy a whole department; I do not dispute it. But the consequence is that in the commune there are farmers with three times as much land as they can cultivate, and on the other hand there are small proprietors who have three or four cows, and for whom it will be

impossible for a whole generation to increase their herd by one cow for want of being able to buy a corner of a marshy field (not that there are no such corners in the commune) which, well cultivated, would be an excellent meadow. How many small rural households I have seen setting out for some town, who, though having the means to keep one, two or three cows, yet had no hope of gradually attaining a modest competence. They preferred to migrate rather than live in penury."

Here is a letter from the Loire: "For two years I have sought up hill and down dale without the least success. I have used your advertisement columns for a long time without result. I have written letters in all directions, to nearly all the departments adjoining mine. I have begged many friends to make inquiries, and I have always received the same answer: Here there is not the smallest plot of ground to be had! So I have finally given up farming like X, Y and Z here."

And from Isère: "Since the buying up of the land every one has gone away, including the children of the land owners. In my hamlet, in which in 1914 there were 78 electors, the proprietors, *nouveaux riches*, will not have their children cultivate the land."

He gives many examples and then adds: "There is too much money in the country, and those who are returning from the war have none at all. If the State requires corn, it is not by paying high prices that it will obtain it, but by obliging people to cultivate the land and expropriating those who cannot cultivate it."

From Haute-Savoie come exactly the same complaints:

"He who says that the cultivators are compelled to go and work in factories is quite right, for I am somewhat in that case myself. I was a cultivator, I was mobilized for the whole duration of the war, and on my return, with increased prices of everything, my landlords sold the land which I rented from them. It was sold for 10,000 and 15,000 francs per hectare, and I, a small farmer, had not saved enough to buy land at such a price. Who bought that land? Those who were not mobilized and who were themselves already landowners.

"And I am not the only person in this position in my commune. I am forty-five years of age, I have a wife and children to provide for, and at my age it is too late to change my condition. I am seeking for a small farm to rent and I find nothing. I have lost my position through the war, for if I had not been mobilized I could have saved enough to buy the land that I rented.

"Nor do I believe in an agricultural labour crisis for in my country, in Haute-Savoie, it is not the land which is in want of labour, but the labour which is in want of land." (1)

These quotations, given word for word, are calculated to surprise

(1) For a very different region similar particulars were given to the Chamber of Deputies on the occasion of the discussion on the agricultural budget, by M. Inizau, deputy of Finistère, as to the many farmers driven away in consequence of the sale of the land they cultivated. See *Journal Officiel*, 2 February, Chamber, p. 232.

many of those who have reflected or written on the subject of rural depopulation. Undoubtedly they all come from the same region, but that region is large and they are so numerous and so much in agreement that the evil they describe must be real.

If therefore it is established that there is often a want of labour to cultivate the land, it is also certain that those who are anxious to work cannot find land to employ their energies.

This is because they wish to work at home, or at least on their own account, and for their own personal profit, as small landowners, or as tenants or *métayers*, in the hope of ultimately becoming proprietors. On the other hand they refuse to be agricultural labourers. One man writes: "It is not a means of existence for the father of a family; there is too much loss of time caused by snow in winter and rain in summer." Another writes; "Return to the land, yes, but on one's own account."

In short, the land is in want of labour because the peasant who desires to work at home cannot find land available, or has not means to buy it.

It is possible that those concerned are somewhat exaggerating the evil, but there is certainly much truth in what they write.



2. INSTITUTIONS DEALING WITH ALLOWANCES FOR FAMILY CHARGES IN AGRICULTURE. — LES ALLOCATIONS AUX FAMILLES NOMBREUSES AGRICOLES, in *La main-d'œuvre agricole*. Paris, April 1921.

We have already shown in our issue of January-February 1921 (p.56) how the system of allowances for family charges, after having become general in French industry and commerce, had been adopted in agriculture with the institution of the *Caisse mutuelle syndicale d'assurance et de prévoyance* founded by the *Union Régionale des Syndicats agricoles de l'Île de France*. New undertakings have been started, which it may be interesting to describe.

Let us first recall that the *Caisse mutuelle syndicale d'assurance et de prévoyance* of the *Union Régionale des Syndicats agricoles de l'Île de France* has thus regulated its system of allowances:

- (1) Marriage portion (to be fixed);
- (2) Maternity premium of 200 francs at the birth of every legitimate child;
- (3) Monthly and progressive premium for each child after the first: of 10 francs per month for the 2nd child; of 10 francs per month for the 3rd child; of 15 francs per month for the 4th child; of 20 francs per month for 5th child and for all the children who may be born subsequently.

These sums are cumulative.

The *Caisse Patronale de sursalaire aux familles agricoles* was founded under the patronage and at the headquarters of the *Syndicat agricole de la*

région de Paris, 25 rue Tait-bout, Paris, on a basis somewhat analogous, but giving in addition in case of death a family allowance of 100 francs for each child under 13 years of age. By the terms of the by-laws of the *Caisse du sursalaire familial du Médoc* organised by the *Syndicat des grands crus classés de Médoc*, 29 rue Ferrère, Bordeaux, it is provided:

" Art. 5. — The allowance for family charges will be given to every worker of either sex of French nationality working habitually on the holding and receiving wages, in kind or in money, not exceeding 6,000 francs per year, who has at his or her charge one or more living children under fifteen years of age.

" Art. 6. — The allowance will be paid monthly and the worker will only be entitled to it in respect of full periods of one month of work on the holding to which he belongs.

" Art. 7. — If the wife is working elsewhere than on the holding her husband is not entitled to the allowance. A child under fifteen working elsewhere than on the holding gives no right to the allowance.

" Art. 8. — The rate of allowance is: 10 francs per month for one child, 30 francs per month for two children, 45 francs per month for three children, 65 francs per month for four children, 85 francs per month for five children, 120 francs per month for six children.

" Art. 8. — In case of a strike the allowance is suspended for the duration of the strike."

In the existing institutions, the employers' contribution is regulated according to the extent of the holding or according to the number of workmen. In either case, the institutions act as mutual associations, which distribute among their members the amount of the contributions in proportion to the number of children or of workers.

When the employers' contribution is regulated according to the area of the holding, each employer who is a member notifies to the bank: (1) the total area of his holding (arable and pasture); (2) the amount of the sums to be paid by the bank as maternity premiums, allowances, etc., according to the rates given above. With the help of this information the bank fixes the percentage per hectare which will be required to cover the amount of the allowances. Provision is made for a further sum to cover the general expenses of administration.

Naturally, the larger the number of members the smaller is the contribution, because the allowances do not follow the same law of progression as the members, since the number of workmen is proportionally larger for a given area in farms of medium size than in large farms, with the exception of farms which are carried on by a family and therefore do not enter into the calculation. The *Caisse du Syndicat agricole de la région de Paris* calculates that the employers' contribution cannot exceed 4.50 fr. per month and per worker. The system of employers' contributions based upon the number of workers has been adopted by the *Caisse familiale* of Médoc: the employers supply necessary funds by a payment of 4 francs per worker per month.

Superannuated or casual workers, such as the grape-gatherers, are not

counted as persons working on the farm, but the wife of a worker, or his children over 15 year of age, are so counted, when he receives from his employer a lump sum as remuneration for his work and that of his wife or children working like him in the farm. Should the employers' contributions be insufficient to ensure the anticipated allowances, they may be increased to five francs, and even more, but only exceptionally.

Lastly, we may note that the different institutions now working are unanimous in making the payments directly from the central institution to the workers' families, so as to simplify the management of the farms and to assert more clearly the principle of collective liability for the allowances.

FRENCH COLONIES.

THE HIRING OF NATIVE LABOUR IN FRENCH EQUATORIAL AFRICA AND IN THE CAMEROONS — ARRÊTÉ DU GOUVERNEUR GÉNÉRAL DE L'AFRIQUE ÉQUATORIALE FRANÇAISE EN DATE DU 18 FÉVRIER 1921. *Journal Officiel de l'Afrique Équatoriale Française et du Cameroun.*

In view of the scarcity of adult native labourers in certain regions and the imperative necessity to obtain native labour for the execution of great works of public utility, the Governor-General of French Equatorial Africa has just decided that, in each of the colonies of this group (Gabon, Mid-Congo, Oubang-Chari, and Chad) employers hiring labour for themselves, or agents hiring labourers for other persons, may obtain in advance from the Lieutenant-Governor and, in the Cameroons, from the Commissioner, an authorization determining the precise district in which labour may be procured and the number of natives who may be hired.

Moreover, for the whole of the colony and in each of the territorial administrative divisions, unless there is an interchange between them, the number of natives hired for employment as permanent workers or day labourers must not, in any case, exceed a third of the able-bodied adult males, old men and children not being counted.

II. — LAND SYSTEMS

MISCELLANEOUS INFORMATION RELATING TO LAND SYSTEM.

AUSTRIA.

A NEW LAW REGARDING THE SALE OF RURAL PROPERTY.

In an article which appeared in our issue of April 1920 we had occasion to refer to the preparatory work then in progress for a law on the sale of rural property.

This law was recently passed by the National Assembly, and is now in force. It is entitled The Law of 13 December 1919 on the Sale of Agricultural and Wooded Lands (*Gesetz von 13 Dezember 1919 über die Veräußerung land- und Forstwirtschaftlicher Grundstücke [Grundverkehrsgesetz]*) and is reproduced in full in the *Staatsgesetzblatt*, No. 583. We give a summary of its chief provisions.

The aim of the law is to prevent: (1) the purchase of agricultural land for the purpose of selling either the whole or a part as a speculation; (2) the purchase of small peasant holdings or any considerable part of them to form or increase large estates; (3) the purchase of agricultural lands for the formation or extension of game preserves, as care must be taken that they should not be withdrawn from the agricultural purposes for which the nature of the soil is adapted; (4) the payment of prices evidently above the real value of the land, etc. (§ 7).

The law submits to the approval of the Commission for the Sale of Land (*Grundverkehrscommission*) the transmission of landed property, and the concession of a right of usufruct by legal arrangement among living persons in the case of lands which are wholly or partially devoted to agriculture or forestry. The letting of agricultural estates must also be submitted to its approval if for more than six years, and in all cases if the land is devoted to forestry. Contracts made without the required sanction are null and void. The distinction between agricultural lands and those devoted to forestry depends on the actual nature of the lands and the mode of utilizing them, and not on the manner in which they figure for fiscal purposes in the land valuation registers.

The law is not applicable to lands situated in urban localities, nor to those registered as railway or mining property, nor to those required by the State in the interest of the public administration or of traffic, nor to contracts made between husbands and wives, or between relatives in a direct line, or between brothers and sisters or between husbands and wives of sisters and brothers (§ 2 and 3).

The transfer of property and the concession of a right of usufruct, or letting, may be permitted by the Commission only if not in a opposition to the general interest, to the preservation of a class of peasants economically independent, and also eventually to the constitution and preservation of agricultural holdings of small or medium extent; in the case of property exceeding the dimensions of a peasant's holding (1) care must be taken that there should be no opposition between the general interest and the existence of a large estate rationally cultivated, and of importance in the provisioning of the population. (There is thus a possibility of forming large agricultural estates, subject however to economic exigencies). Small wooded lots may be transferred if the contract is in conformity with the collective economic interest, or with their permanent utilization as forest land (§ 4).

In simple cases the desirability of a transfer of land must be taken into consideration by the District Commission for the Sale of Land (*Grundverkehrsbezirkskommissionen*). These are to be formed at the headquarters of every district tribunal, and are to be composed of a magistrate as president, of an agricultural expert nominated by the district political authorities, of a member representing the commune in which the greater part of the estate is situated, and acquainted with local conditions, and of two members nominated by the principal agricultural organization (§§ 10 and 11).

For estates which exceed the dimensions of a peasant's holding, and which are utilized as woods, the competent authority is the Provincial Commission for the Sale of Land (*Grundverkehrs-Landeskommission*). It is to be formed at the seat of the provincial administration, and will be composed of:

- (1) the President of the regional tribunal;
- (2) one member nominated by the provincial agricultural authority;
- (3) one member nominated by the provincial administration from among the representatives of urban or industrial interests;
- (4) an agriculturist nominated by the provincial council (*Landesrat*);
- (5) two members nominated by the principal agricultural organization within whose sphere of action is the commune where the estate is situated, and
- (6) the provincial forestry inspector (§ 14).

To prevent the evasion of the law in the case of forced sale, it is provided (§ 16) that the notice of the sale by auction should be notified to the commune in which the estate is situated and to the nearest agricultural organization. The offers of these bodies, or of persons appointed by them, must be taken into consideration before any others, even if the offers should be of the same amount (§§ 16-17). If the Commission for

(1) For the purposes of the law a peasant's holding is understood to be all lands held by one single individual, and forming a single agricultural or forestry undertaking, the average annual returns from which do not exceed six times what is required for the maintenance of a family of seven persons (§ 5, paragraph 2).

the Sale of Land, to which every assignment of land sold by auction must be notified, should find that the person to whom it is assigned does not fulfil the requirements of the law, the tribunal must ask the agricultural organization to declare within three weeks whether it, or a person appointed by it, intends to buy the land according to the conditions of the auction, and at the highest price offered (§ 18). It is only when this organization does not indicate any purchaser that the estate is handed over to the highest bidder (§ 19).

The provision in § 21 of the law is also important. According to this, the seller of an estate to which the rules in question are applicable, has the right to withdraw from the bargain up to the time when the purchase is entered in the land register, without the possibility of the buyer advancing a claim to compensation for damage.

This law, which is intended to prevent any sale which may be economically injurious, especially if it tends to the elimination of the class of small proprietors who are cultivators, or to the excessive subdivision of peasants' holdings, has given excellent results in the few months of its application, and has in many cases succeeded in preventing the absorption of agricultural holdings. But so far it has not been successful in checking the extraordinary increase in the price of land. But it must however be remembered that this increase, economically very injurious, would have been still greater if the above mentioned law had not excluded many competitors from the demand for agricultural property.

BULGARIA.

BILL, RESPECTING LANDED PROPERTY. — *L'Echo de Bulgarie*, Sofia, 28 March 1921.

A bill respecting landed property has lately been introduced into the Chamber of Deputies.

The first clause of this bill asserts that every family has a right to occupy and to cultivate by its own labour an area of 30 hectares of land. No person may own more than 4 hectares if he is unmarried, or 10 hectares if he is the head of a family.

If several families share one farm each family has the right to assert its title to ownership.

The bill afterwards regulates the procedure for the expropriation of large estates. This task is entrusted to a special commissioner acting in the commune. The expropriation is pronounced by the Office for Landed Property Acquired by Labour and the value of the expropriated land is paid into a fund instituted in connection with this office. To this fund the lands belonging to the Agricultural Bank and the National Bank of Bulgaria have been transferred.

Lands belonging to convents, not cultivated according to modern methods, are expropriated.

To pay for the expropriated lands the average prices of the last ten years are taken as a basis. The payment will be effected in bonds of the

Agricultural Bank. The lands will be sold to the peasants who are not already owners of land at the price of expropriation with 10 per cent. added.

FRENCH COLONIES.

THE REGISTRATION OF LANDED PROPERTY IN FRENCH EQUATORIAL AFRICA.

— DÉCRET DU 12 DÉCEMBRE 1920 MODIFIANT LE DÉCRET DU 28 MARS 1899 PORTANT ORGANISATION DE LA PROPRIÉTÉ FONCIÈRE EN AFRIQUE ÉQUATORIALE FRANÇAISE. — *Journal Officiel de l'Afrique Equatoriale Française*, 15 février 1921.

The system of registration of landed property was introduced in 1899, but only in the interests of Europeans and natives naturalized as Frenchmen in French Equatorial Africa.

It seemed necessary to modify this legislation. During the last twenty years, in fact, the native mentality has improved and developed; the dweller in urban centres, in permanent contact with Europeans, has without doubt acquired the sense of individual property. On the other hand, the fact of a native requesting a concession of rural land and improving it is a sure sign of an evolution which should be encouraged.

It was felt therefore, that the time had come to assure to the natives the guarantees conferred by the system of land registration, and this reform was carried out by a decree of 12 December 1920.

By the terms of this decree, the system of registration of landed property is applicable to Europeans, descendants of Europeans, and natives who have become naturalized as Frenchmen and, individually, to "all other natives in regard to such of their lands as are situated within a town boundary or rural properties of which they are owners in full but not in regard to lands held in common." On the other hand all other property belonging to natives, and that held in common, will still be governed by local customs and local usages as regards their acquisition, tenure and transfer.

Land registration, at first optional, was made compulsory:

- (1) In all cases of sale or grant of ownership of public lands.
- (2) In all cases where Europeans, or those assimilated to them, have come into possession of property belonging to natives.
- (3) In all cases where a man who has received a grant, and made improvements according to the terms of this contract becomes owner of the land granted to him.

NORWAY.

THE INCREASE IN THE VALUE OF LAND FROM 1909 TO 1918. — STATISTISK AARBOK FOR KONGERIKET NORGE (*Statistical Year Book of Norway*). Year 1919. Christiania, 1920.

If we examine the variations in the price of land in the rural communes of Norway from 1909 to 1918, we arrive at the following average values:

Average Value in Crowns per "skjld mark" of Rural Land.

Prefecture	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918
Østfold	2,251	2,451	2,406	2,620	2,677	2,893	3,108	3,396	4,453	7,013
Akershus	2,338	2,660	2,619	2,815	3,203	3,228	3,312	3,614	6,186	7,663
Hedmark	2,086	2,314	2,310	2,446	2,565	2,614	2,922	3,492	4,226	6,896
Opland	1,965	2,069	2,222	2,593	2,589	2,701	2,838	3,227	4,757	6,791
Buskerud	2,401	2,637	2,584	2,808	3,167	3,138	3,369	3,664	5,854	8,998
Vestfold	2,560	2,690	2,809	3,015	3,148	3,366	3,597	4,035	5,748	8,006
Telemark	2,395	2,734	2,776	3,023	3,208	3,333	3,700	4,162	6,580	8,391
Aust-Agder	2,162	2,349	2,453	2,649	2,713	2,982	3,107	3,533	5,577	7,111
Vest-Agder	2,522	2,518	2,735	2,799	2,902	3,199	3,544	3,508	5,901	7,245
Rogaland	2,348	2,444	2,422	2,633	2,749	2,833	2,947	3,714	5,531	7,310
Hordaland	1,825	2,066	2,035	2,130	2,244	2,537	2,588	2,855	4,254	5,925
Sogn og Fjordane	1,735	2,002	2,063	2,133	2,185	2,179	2,365	2,755	3,573	4,294
Møre	1,711	1,753	1,980	1,941	1,982	2,225	2,413	2,355	3,234	4,890
Sør-Trøndelag	1,933	2,116	2,217	2,288	2,484	2,531	2,532	3,142	4,452	6,458
Nord-Trøndelag	1,673	1,718	1,892	1,943	2,131	2,358	2,504	2,554	3,518	5,363
Nordland	1,181	1,341	1,287	1,347	1,586	1,693	1,735	2,127	2,496	3,507
Troms	1,671	1,680	1,851	1,851	2,280	2,083	2,136	2,654	4,370	5,324
Average for the whole country exclusive of Finmark	2,114	2,308	2,372	2,488	2,664	2,782	2,982	3,388	5,068	7,182

As we see, the value of rural land, even before the war, was increasing appreciably every year, and since that time it has acquired a considerably higher value. This increase is particularly remarkable from 1917 to 1918, when the average value rose from 5,068 crowns to 7,182 crowns, or more than 40 per cent. From 1914 to 1918 the average increase in value is about 160 per cent.

III. — MISCELLANEOUS QUESTIONS

INFORMATION RELATING TO MISCELLANEOUS QUESTIONS

'AUSTRIA.

1. THE FIRST MOUNTAIN ECONOMY CONGRESS. — STRACKOSCH: Die Grundlagen der österreichischen Agrarwirtschaft. Vienna, 1917 — OSTERMAYER: Who haben Wiederherstellung und Steigerung der Leistungsfähigkeit unserer Landwirtschaft einzusetzen? *Mitteilungen der deutschen Landwirtschaftsgesellschaft für Österreich in Wien*, No. 21, 1920.

Of the total cultivated area in the Austrian Republic, 36 $\frac{1}{2}$ per cent. is occupied by meadows, pastures, and mountains. Of the arable land 16 $\frac{1}{2}$ per cent is devoted to the cultivation of forage crops. These two figures show what the most important part of agricultural production in Austria should be; not arable farming, but stock farming, as in Swit-

zerland, which has many analogies with Austria as regards the nature and conformation of the soil.

But stock farming in Austria has by no means reached the desired point of development and is far behind that of Switzerland. There are various reasons for this inferiority. It is partly owing to natural causes, susceptible of modification only to a certain extent. The climate is drier and the winters are longer, so that the growth of the grass is slower and weaker. Part of the land is more sterile and poorer in clay. (Some of the land on the limestone hills has a soil formed of almost pure carbonate of lime, which, because of the inclemency of the weather and consequent loosening of the earth, contains scarcely any clay). Other reasons are connected with the history and economic conditions of Austria. The old State possessed agricultural districts so rich as to enable it to neglect those less favoured. Too little was done for the instruction of the Alpine population whose efforts to promote the breeding of cattle were supported only to a limited extent. But the chief cause is the want of any organization of the sale of dairy produce, which can only become profitable where there is a possibility of a market for it. On the other hand, the inhabitant of the Alpine zone, unable to procure the large quantities of concentrated feeding stuffs which his more fortunate rivals in Bohemian and Hungarian territories can purchase cheaply from breweries, distilleries, and sugar refineries could not compete with those rivals in breeding fat stock. Thus there was no means of extending the breeding of cattle in the Alpine territories, and the mountain peasants therefore betook themselves to exploiting the woods, which being managed in an unsatisfactory manner could not supply the needs of their families.

This condition of things must now be improved. An outward sign of the work already done is the convocation of the first Austrian mountain economy congress held at Salzburg from 13 to 16 November 1920.

For this congress about 700 tickets were distributed. Several reports were read which gave rise to lively discussions, showing the interest taken in the subject, and proving that many peasants were ready to introduce improvements into their farms, and to make intensive the hitherto merely extensive farming.

It was also decided to form a society for Alpine economy modelled upon that which works so well in Switzerland, with the object of co-ordinating all the efforts made with regard to mountain economy. As the Bavarian representatives requested to be received into the society, its sphere of action was extended to that region, and it assumed the name of *Österreichischbayerischer Alpwirtschaftsverein*.

The Society will certainly bring about real progress. Indeed various efforts made by enlightened agriculturists to introduce into Austria more modern economic principles respecting pastures and the care of mountain lands have been crowned with success, and have produced results not much inferior to those of the Swiss models.

The formation of the above mentioned Society gives hope that the problems of mountain economy will be thoroughly investigated in the general interest.

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2. THE INCREASE OF SMALL MARKET GARDENS IN 1920.

The cultivation of small market gardens, which we described in an article entitled "The Development of Small Garden Unions during the War," which appeared in our issue of March 1920 increased in a remarkable degree during the year 1920.

The area cultivated and the number of market-gardeners have increased by about one-half. And as the small market-gardeners are becoming more experienced and the returns per unit of area increase in proportion to the appropriateness of the labour and the accuracy of the cultivation, the extent to which the crops can supply the requirements of the urban centres is continually increasing.

Not only is the land being more intensively cultivated but there is much more breeding of small live stock. The number of rabbits and goats is continually increasing. Sometimes bee-keeping is taken up; in one district near Linz the small market gardeners are utilizing a sheet of water for breeding fish. A sense of beauty is also gradually manifesting itself. While at first the gardens were extremely simple and without decoration, now an effort is observed here and there to make prettier hedges, to improve the appearance of the wooden sheds in which tools are kept and to grow flowers wherever they are suitable. In accordance with experience accumulated from year to year the advantages of a uniform and systematic utilization of the garden beds, hitherto quite irregular, are now recognized. The walls of sheds, which are often built so as to admit of spending nights in them or even of living in them during the summer, are decorated with scarlet runners. Fruit-trees are also more frequent, generally dwarf plants or bushes.

The organizations of small market-gardeners are continually growing in strength and importance. They provide for the purchase of appliances in common, and of all that is needful for gardening work, such as chemical fertilizers and seeds; they assist their members in finding and preparing new gardens; they provide instruction and organize meetings, lectures, and exhibitions. The 73 societies of Vienna each of which covers a given territory, a district zone, are federated in the *Schreibergärtner-Verein*, the organ of which, the *Gartenfreund*, is gradually increasing in value and extending its circulation.

To build a dwelling-house in their own gardens is the eager desire of many small market gardeners but it is impossible to realize this desire at present because of the extraordinary scarcity of building materials.

As a preparatory effort, in December 1920 a bank for small market

gardeners was established, to keep alive and to stimulate a desire to save.

It is to be observed that among small market-gardeners, the number of war invalids and disabled men is increasing and that the movement is promoted by public funds. (In the balance sheet of the city of Vienna there is an entry of 8 million crowns to be devoted to the encouragement of small market gardens. Part of this sum will be spent on a system of water supply; the cost will be repaid by instalments. Another portion will be devoted to the purchase of plants and seeds for gratuitous distribution).

According to an estimate made by the Federation of Small Market-gardeners, the 28,000 members belonging to it have bred or produced: 28,000 goats, 564,000 rabbits, 280,000 pure-bred fowls, 56,000 bee-hives, 140,000 pear trees, 224,000 apple trees, 176,000 plum trees, 28,000 peach trees, 28,000 bitter cherry trees, 868,000 currant bushes, 140,000 gooseberry bushes, 1,764,000 raspberry bushes, 11 million kilogrammes of potatoes, 1,148,000 kilogrammes of beans, 2,352,000 kilogrammes of white cabbages, 1,568,000 kilogrammes of tomatoes, etc.

FRANCE.

GARDENING BY INDUSTRIAL WORKERS IN THE FREE TIME AFFORDED BY THE EIGHT HOURS DAY. — ENQUÊTE DU MINISTÈRE DU TRAVAIL, in the *Bulletin du Ministère du Travail*. Paris, August-December 1920.

In the course of the debate on the eight hours law of 23 April 1919, many speakers, both in the Chamber and the Senate, insisted on the necessity, in order to ensure the honest carrying out of the new régime, of taking measures to secure the utilization of the leisure which the eight hours day would give to the wage-earners. "It will be necessary," said M. RIBOT, president of the Senate committee, "to provide for the workers who have leisure the means of spending their time otherwise than in idleness, which must be injurious both to their health and their lives."

The Minister of Labour pointed out this necessity to the labour inspectors; by a circular of 27 May 1919 he requested them to call the attention of organizations both of employers and workers to the means of attaining the object. The inspectors were asked to follow attentively and to report any initiatives taken by employers, so that those that seemed the most interesting might be taken as examples. Now the number of workers to whom the eight hours law is applicable amounts, according to the statistics of 1911, to 10,700,000 (exclusive of agricultural labourers, but including the liberal professions and the administrative services, which are grouped together in the statistics). Of this total nearly three millions of workmen are affected by the decrees which have already been issued relating to the application of the law. We give the first reports of the inspectors on the subject of kitchen-gardening:

1. The *Société Péugeot* (makers of motors and metal goods), whose

workshops are at Doubs, distributed gratuitously in 1920, 170 gardens from 2 to 6 ares in extent. This was all the cultivable land at its disposal. It has as yet been impossible to satisfy all the applications received.

2. At Arques-la-Bataille (Seine Inférieure) the three industrial establishments *Baudelot* (mechanical carpentry, 170 workmen), *Thoumyre fils* (patent fuel and mechanical construction, 309 workmen) and the *Société Française La Viscose* (artificial silk spinners, 857 workmen) have built workmen's dwellings, all with gardens placed rent-free at the disposal of the workmen, or have supplied them with other land adapted for kitchen-gardening. The occupiers of these different gardens take part in competitions with two classes of prizes: some for keeping the gardens in order, others for vegetables, fruit, and flowers.

3. The *Société Ateliers et Chantiers de la Seine-Maritime* is constructing, close to its shipbuilding yards at Trait (Seine Inférieure) a new village capable of housing 4,000 persons and up to the present time has made 250 workmen's gardens. The area of each garden is in proportion to the size of the occupier's family.

4. The workmen of the *Société des Etablissements Badin* (flax spinning, employing about 1,913 persons) at Barentin (Seine Inférieure) have at their disposal, in addition to the garden adjoining their habitation which is not sufficient for the cultivation of vegetables, 105 workmen's gardens in the open country, yet near the locality, and of the average size of 200 square metres.

5. The managers of the *Etablissement Schneider and Co.* (metal workers) at Londe-les-Maures (Var) are particularly desirous of encouraging gardening and a taste for agriculture. Near the works and on land at their disposal they have built and continue to build houses and workmen's villages. At present, of about 750 persons employed in the works, 150 are lodged in these dwellings to each of which is attached a garden.

In order to create and keep up emulation in cultivating and utilizing these gardens, there is a competition every year in May or June, with money prizes (250 francs for 10 prizes in 1919; 250 francs in 1920, for 6 prizes of 100 fr., 50 fr., and 25 fr.). All the gardens are inspected and whether they work more or less, all the occupiers of gardens share automatically in the competition; there are thus as many competitors as there are workmen's houses occupied. In 1919 there were 57 competitors, or 20 per cent. of the employés of the establishment (276), and 10 per cent. of the whole number of employés (586); in 1920, 90 competitors or 18 per cent. of adult men (490) and 12 per cent. of the employés (750).

6. At Pavilly (Seine Inférieure), the *Etablissements Maillard*, cotton spinning and mechanical construction, employing 624 workmen, have provided gardens for the fathers of the largest families.

7. A foundry at Montbrison has caused a piece of land of about 4 hectares in extent to be ploughed, divided into lots of about 205 square metres each and granted to its workmen at a rent of five francs a year; the produce of these allotments is handed over to an association of gardeners to be spent in purchases in common. Not more than 60 gardens

were applied for in 1920, but some of the workmen succeeded in obtaining private gardens nearer their own dwellings.

8. At Caudebec en Caux the *Société Lathum et Cie.*, manufacturers of furniture and hydroplanes (300 workmen) have made gardens for their employés.

9. MM. Viellard-Migeon, ironmasters and screw makers, at Morvillars, Méziré, and Grandvillars (Territory of Belfort), have gratuitously placed at the disposal of their workmen gardens 8 ares in extent which are nearly all cultivated.

10. The *Cie. Chatillon Commentry et Nouvelles Maisons*, metallurgy (Saint-Jacques Works at Montluçon) employing 2,730 workmen, at present possesses 510 gardens, of 300 square metres each, which are let at 12 francs a year on registered lease. The Company has just bought a piece of land of 9 hectares, and can make 300 new gardens to be let to workmen on the same terms.

11. The *Cie. Saint-Gobain*, plate-glass manufacturers, has formed, for the 1,100 workmen and employés in its works at Montluçon, 253 gardens, from 200 to 300 square metres in extent, and founded, in 1919, a horticultural union, which numbers 245 members. The gardens are placed under the direction of the departmental professor of agriculture. The Company is planning the purchase of more land, in order to increase considerably the number of gardens.

12. The establishment of *Sondry Frères*, makers of horse-shoes, at Les Trilliers, near Montluçon, employing 200 workmen, is at present making for its employés 25 gardens of 300 square metres each.

13. The *Société Lafosse, de Menibus et Cie.*, cotton spinners at Deville-les-Rouen, some years ago placed at the disposal of its employés the unoccupied land adjoining the offices of the establishment. This land, divided into 108 lots of 100 square metres on an average, is very carefully cultivated by the workmen and their wives who go there as soon as the day's work is over, and even spend there part of Sunday; the managers receive more requests from workmen than they can satisfy.

14. The firm of *Fouché*, machine makers at Angoulême, employing 69 persons, has rented near the factory a large garden, which it has let in plots and without profit to those workmen who have a taste for horticulture.

15. The *Michelin* india-rubber works at Clermont-Ferrand, desires to ensure to its workmen a pleasant home which may attract and retain them and to place at their disposal a garden to occupy their spare time. The firm already possesses 420 dwellings of two, three, four and five rooms. Its programme was to complete by the end of 1920, 108 dwellings in 27 buildings, and in 1921 to construct 424 dwellings in 106 buildings. To each dwelling is attached a garden of about 200 square metres. Lest this garden should prove insufficient to occupy all a man's leisure, it has been decided to obtain on advantageous terms, for all who make application, another garden which may be 800 square metres in extent.

16. The *Bergongnan* india-rubber works, also at Clermont-Ferrand,

now lets 80 dwellings and 82 gardens from 100 to 200 square metres in extent to its workmen. This work is still in progress.

17. The *Établissements réunis*, manufacturing drapery at Vienne, let to their workmen 50 gardens of 300 square metres each at 30 francs per year; the firm intends to double this number. On the other hand there is at Vienne a system of gratuitous gardens in which this firm is interested for a considerable sum.

18. The *Compagnie d'énergie électrique Loire et Centre* (100 workers and employés) possesses at its works at Montluçon 56 gardens of 300 square metres, granted free of charge.

19. The *Coll* works, at Moulins (300 workmen) made, in 1919, 102 gardens granted free of charge.

20. The *Établissements Grammont* at Lyons have made 70 gardens of 200 square metres each, granted free of charge.

21. The *Cie du gaz de Lyon* places at the disposal its workmen more than 100 gardens.

22 and 23. Gardens have also been made by the *Cie. des Hauts Fourneaux de Chasse*, and by the *Acéries de la Marine de Saint Chamonds*.

NEW ZEALAND.

CHANGES IN THE AGRICULTURAL POPULATION. — REPORT ON THE RESULTS OF A CENSUS OF THE POPULATION OF THE DOMINION OF NEW ZEALAND TAKEN FOR THE NIGHT OF THE 15TH OCTOBER 1916. Wellington, 1920.

The publication of the Report on the Census of 1916 was considerably delayed owing to the pressure of work in the Census and Statistics Office arising out of the Military Service Act. It has now, however, been published and we extract from it some facts and figures relating to the changes in the agricultural population.

The following table shows the distribution of the population at each quinquennial census since 1881 in counties and boroughs.

TABLE I. — *Distribution of Population in Counties and Boroughs.*

Census Year	Counties	Boroughs	Percentage	
			Counties	Boroughs
1881	291,238	194,981	59.44	39.80
1886	327,328	245,612	56.58	42.46
1891	352,097	270,343	56.18	43.14
1896	391,735	307,294	55.69	43.69
1901	417,596	350,202	54.04	45.32
1906	458,797	424,614	51.63	47.79
1911	496,779	505,598	49.26	50.14
1916	501,259	585,306	45.59	53.24

A small percentage in each census year is enumerated as being on shipboard, etc., and so does not figure either in counties or in boroughs.

The counties contain what is understood to be rural population, but this is not strictly correct, as some of the towns not municipalized and forming parts of counties have considerable populations. On the other hand, the population of a few of the smaller boroughs should strictly be classed as rural.

A progressive increase may be noted in the proportions of the population living in the boroughs, an increase which (says the Report) many would be inclined to view with alarm when it is considered that New Zealand is a primary producing and not a manufacturing country. As compared with Australia, however, the rural exodus is not marked. In Australia, at the end of 1915, 40.06 of the population resided in the six state capitals, while in New Zealand in 1916 only 35.42 per cent. of the population resided in the so-called "Metropolitan areas" of Auckland, Wellington, Christchurch and Dunedin.

Table II shows the ratios of married to not married calculated at each of the last ten census-takings for persons 21 years of age and over, divorced and widowed persons being treated as single.

TABLE II. — *Nuptial Ratios for Population of 21 Years of Age and Over.*

Census	Males	Females	Total
March 1874.	0.916	2.907	1.463
March 1878.	1.071	3.806	1.661
April 1881.	1.111	3.333	1.650
March 1886.	1.181	2.704	1.635
April 1891.	1.180	2.157	1.522
April 1896.	1.124	1.800	1.382
March 1901.	1.127	1.606	1.323
April 1906.	1.099	1.615	1.305
April 1911.	1.189	1.703	1.398
October 1916.	1.802	1.870	1.836

The changes are very striking, but are easily explicable by reference to the history of the country. The majority of females in New Zealand in 1874 were women who had come with or in order to join their husband. Few unmarried women would, on the other hand, migrate except for the purpose of marrying men who had preceded them to prepare a home for them. The immigrants being persons in the prime of life, there would also be few widows. For males, on the other hand the position was very

different. Difficulties of colonization in distant lands were, such as to deter married men rather than single. Thus the majority of men coming into the country would be single.

During the subsequent forty years conditions changed. Children were born to the early settlers and grew up to manhood and womanhood; the country entered upon years of prosperity and became a more attractive place for women to enter. The settlers who entered the country in the prime of life reached old age, with the result that widowhood increased. Conditions no longer operated to make the number of unmarried women in the country small. With males, on the other hand it was otherwise. The country had been opened up and had become a more suitable place than before for married men to make their homes in; moreover, the children of the early settlers had grown up and married amongst themselves. Under such circumstances the proportion of married men would increase.

The number of unmarried males over 20 years of age per 100 unmarried females over 15 years of age is 103 for the counties and 49 for the boroughs. Women tend to congregate in the towns, while the country districts are remarkable for the paucity of single women. On the other hand, males tend to congregate in the country.

With regard to occupation, the population was divided into "Breadwinners" and "Dependents." The Breadwinners were divided into seven classes: I. Professional; II. Domestic; III. Commercial; IV. Transport; V. Industrial; VI. Primary Producers, and VII. Indefinite.

The sixth class includes agricultural, pastoral, mineral and other primary producers; in fact, it embraces all persons mainly engaged in the cultivation of food products and in obtaining other raw materials from natural sources.

The following table shows how the percentage of breadwinners belonging to each class of occupation at successive census-takings.

TABLE III. — *Proportions of Breadwinners
belonging to each Class of Occupation.*

	1901	1906	1911	1916
I. Professional	6.91	6.79	7.20	9.25
II. Domestic	10.11	9.97	9.75	9.21
III. Commercial	11.74	13.07	14.49	14.54
IV. Transport	6.39	7.11	8.02	9.33
V. Industrial	29.74	31.13	29.41	25.68
VI. Primary producers	32.90	29.67	28.75	29.11
VII. Indefinite	2.21	2.31	2.38	3.89
Total breadwinners . . .	100.00	100.00	100.00	100.00

The fluctuations in the respective proportion of the industrial class and the class of primary producers are rather curious. It will be noted that whereas the primary producers were the most numerous class in 1901, they lost this position in 1906, but regained it again in 1916. Taking the absolute figures for these two classes, we find a steady increase for the primary producers, the total numbers being 111,921 in 1901; 118,373 in 1906; 130,581 in 1911 and 132,499 in 1916. On the other hand the industrial class increased rather rapidly from 1901 to 1911 and then declined. The figures are 101,184 in 1901; 124,255 in 1906; 113,684 in 1911 and 116,919 in 1916.

The following table shows the numbers of males and females engaged as primary producers, the class being divided into seven sub-orders.

TABLE IV. — *Agricultural, Pastoral, Mineral and other Primary Producers.*

	Males	Females	Total
1. Persons directly engaged in agricultural pursuits	33,613	1,366	34,979
2. Persons directly engaged in pastoral pursuits.	74,135	8,295	82,430
3. Persons engaged in rabbiting, bee-keeping, etc	515	15	530
4. Persons directly engaged in fisheries, etc.	922	2	924
5. Persons directly engaged in forestry or the acquisition of raw products yielded by natural vegetation.	2,156	4	2,160
6. Persons engaged in the conservancy of water	332	—	332
2. Persons engaged in mines, quarries, etc.	11,141	3	11,144
Total	122,814	9,685	132,499

The following figures show the actual numbers of persons engaged in agricultural and pastoral pursuits:

	1901	1906	1911	1916
Males	85,323	93,504	102,574	107,748
Females	3,899	3,453	7,451	9,661
Total	89,222	96,957	110,025	117,409

Though the census separates persons engaged in agricultural from those engaged in pastoral pursuits, it should be remembered that there is a large class of general farmers who are partly engaged in pastoral and partly in agricultural farming. A comparison with previous census-takings seems

to show a marked fall in the numbers of agricultural and a marked increase in the numbers of pastoral farmers. In part this may be due to differences of classification of the general farmers at the various census-takings, but it is clear, on a reference to the export figures, that there has actually been some falling-off in exports of agricultural produce, with a more than corresponding increase in exports of pastoral produce and this seems to suggest that pastoral pursuits have considerably supplanted agricultural pursuits. It would be difficult to say whether this has taken place to the extent suggested by the following census figures :

Census	Persons engaged in agricultural pursuits	Persons engaged in pastoral pursuits
1901	67,812	21,410
1906	69,557	27,400
1911	54,738	55,287
1916	34,979	82,430

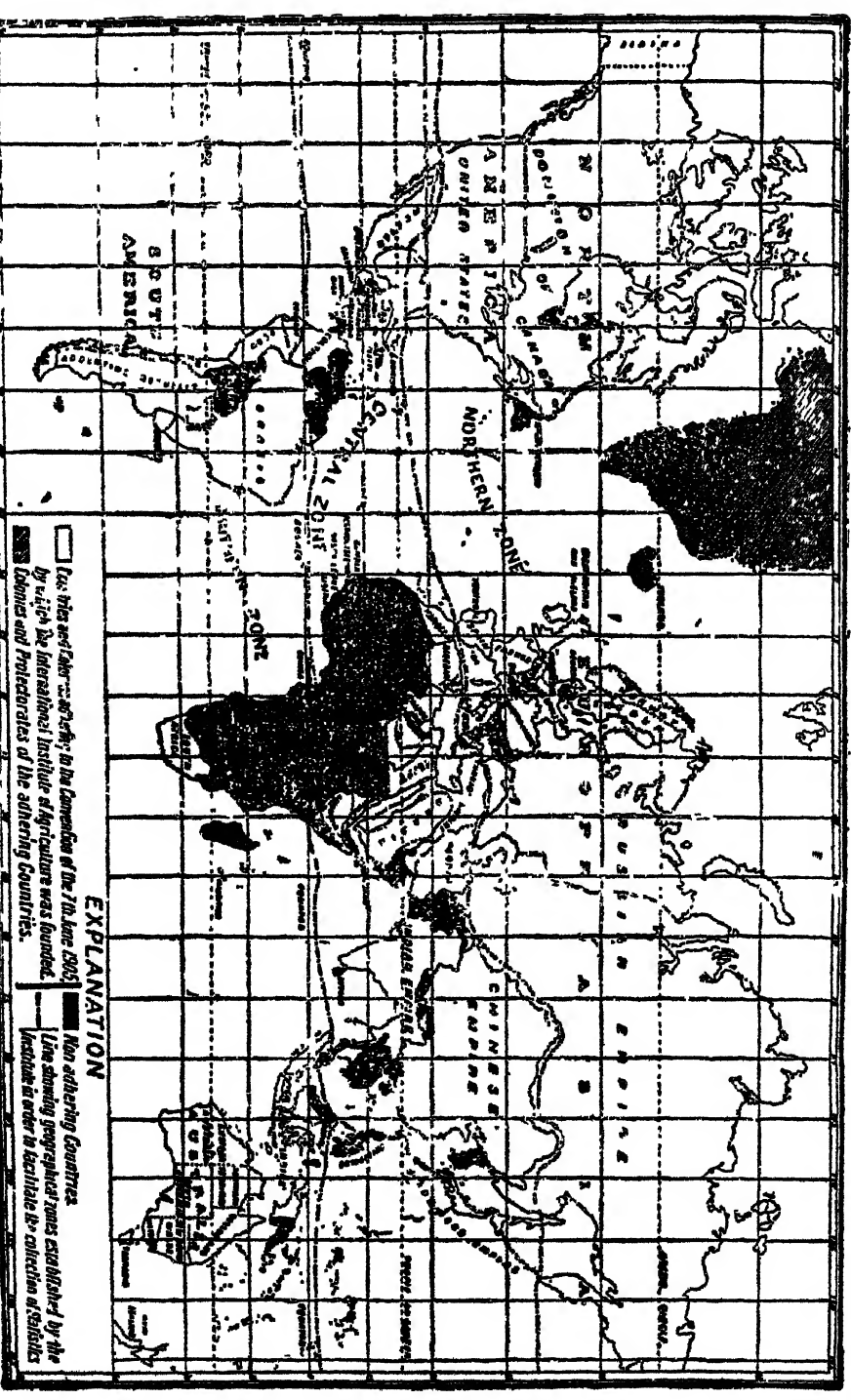
Without pronouncing dogmatically on the cause of this apparent fall in the proportion of the population engaged in agriculture, the Report affirms that some or all of the following circumstances have not been without their influence :

(1) Increased efficiency, either as a result of improved personal knowledge and efficiency or of better farm equipment, thus necessitating fewer people to do a fixed amount of work.

(2) Specialization, as a result of which the farmer undertakes a smaller variety of tasks than before. In the past the farmer combined in himself the functions of baker, butter-manufacturer, etc., but these functions are now being relegated to specialists.

(3) Improved transport facilities, whereby farmers perform a smaller amount than heretofore of the hauling of farm-produce to market.

(4) The greater "net advantages" in the shape of better conditions and higher profits offered by pastoral pursuits.



EXPLANATION

- ☐ Countries and Colonies in the possession of the 7th June 1905
 by which the International Institute of Agriculture was founded.
- ☐ Non adhering Countries
 (Lines showing geographical zones established by the
 Institute in order to facilitate the collection of statistics)
- ☐ Colonies and Protectorates of the adhering Countries.

INTERNATIONAL INSTITUTE OF AGRICULTURE
BUREAU OF ECONOMIC AND SOCIAL INTELLIGENCE

INTERNATIONAL REVIEW OF AGRICULTURAL ECONOMICS

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THE INTERNATIONAL INSTITUTE OF AGRICULTURE

ORIGIN OF THE INSTITUTE AND SUMMARY OF THE INTERNATIONAL TREATY.

The International Institute of Agriculture was established under the International Treaty of 7 June 1905, which was ratified by forty governments. Nineteen other governments have since adhered to the Institute.

It is a Government institution in which each country is represented by delegates. The Institute is composed of a General Assembly and a Permanent Committee.

The Institute, always confining its attention to the international aspect of the various questions concerned, shall :

(a) collect, study and publish as promptly as possible, statistical, technical, or economic information concerning farming, vegetable and animal products, trade in agricultural produce, and the prices prevailing in the various markets ;

(b) communicate the above information as soon as possible to those interested ;

(c) indicate the wages paid for farm work ;

(d) record new diseases of plants which may appear in any part of the world, showing the regions infected, the progress of the diseases, and if possible, any effective remedies ;

(e) study questions concerning agricultural co-operation, insurance and credit from every point of view ; collect and publish information which might prove of value in the various countries for the organization of agricultural co-operation, insurance and credit ;

(f) submit for the approval of the various governments, if necessary, measures for the protection of the common interests of farmers and for the improvement of their condition, utilizing for this purpose all available sources of information, such as resolutions passed by international or other agricultural congresses and societies, or by scientific and learned bodies, etc.

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PRINCIPAL WEIGHTS, MEASURES AND MONEY OF THE VARIOUS COUNTRIES AND THEIR BRITISH EQUIVALENTS

1 Cadastra arpent (Hungary)	=	1.42201	acres
1 Centimetre	=	0.393715	inches
1 Cho (60 ken) (Japan)	=	119.30327	yards
1 Crown (100 heller) (Austria-Hungary)	=	10 d.	at par
1 Crown (100 öre) (Denmark, Norway, Sweden)	=	15.1 $\frac{1}{8}$ d.	at par
1 Deciatine (2 tcherwert, (Russia)	=	2.69966	acres
1 Dinar, gold (100 para) (Serbia)	=	933/64 d.	at par
1 Dollar, gold (\$) (100 cents) (United States)	=	45.5/16 d.	at par
1 Drachm, gold (100 lepta) (Greece)	=	933/64 d.	at par
1 Egyptian Kantar	=	99.0498	lbs.
1 Feddan Masri (24 Kirat Kamei) (Egypt,	=	1.03805	acres
1 Florin, gold, or Gulden (100 cents) (Netherlands)	=	15.753/64 d.	at par
1 Franc (100 centimes) (France)	=	933/64 d.	at par
1 Gramme	=	0.03527	oz.
1 Hectare	=	2.47109	acres
1 Kilogramme	=	2.2	lbs.
1 Kilometre	=	1093.613	yards
1 Kokou (10 To) (Japan)	=	1.58726	quarts
1 Lei, gold (100 bani) (Rumania)	=	933/64 d.	at par
1 Leu (100 stotinki) (Bulgaria)	=	933/64 d.	at par
1 Lira (100 centesimi) (Italy)	=	933/64 d.	at par
1 Litre	=	0.21998	gallons
	=	0.0275	bushels
1 Mark (100 Pfennige) (Germany)	=	11 3/4 d.	at par
1 Mark (100 penni) (Finland)	=	933/64 d.	at par
1 Metre	=	3.28084	feet
1 Milreis, gold (Brazil)	=	25. 261/64 d.	at par
1 Milreis, gold (Portugal)	=	45. 519/64 d.	at par
1 Peseta, gold (100 centimos) (Spain)	=	933/64 d.	at par
1 Peso, gold (100 centavos) (Argentina)	=	34.1137/64 d.	at par
1 Pound, Turkish, gold (100 piastre) (Ottoman Empire)	=	185.015/64 d.	at par
1 Pund (Sweden)	=	0.93712	lbs.
1 Quintal	=	1.96843	cwts.
1 Rouble, gold (100 kopeks) (Russia)	=	25.1 3/8 d.	at par
1 Rupee, (16 annas) (British India)	=	$\frac{1}{10}$ of £1 (gold)	
1 Talar (20 piastre) (Egypt)	=	45.111/32 d.	at par
1 Verst (Russia)	=	1166.64479	yards
1 Yen, gold (2 fun or 100 sen) (Japan)	=	25.037/64 d.	at par
1 Zentner (Germany)	=	110.23171	lbs.

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INTERNATIONAL REVIEW
OF AGRICULTURAL ECONOMICS

(MONTHLY BULLETIN
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Part I: Co-operation and Association

GERMANY.

THE AGRICULTURAL CO-OPERATIVE MOVEMENT
IN 1918-19 (*Continued*).

§ 5. THE CO-OPERATIVE DAIRY SOCIETIES.

Dairy societies represent the only class of co-operative society which has not shared, during the year under review, in the general and intense development of all agricultural co-operative societies. Their condition had already grown steadily worse during war time; in the third year of the war, 1917, their development was at a standstill and in the fourth year, 1918, their number began to diminish, the decrease in that year being eight. During the year 1918-19 the decrease was still greater, rising from 8 to 26. The causes of this decrease have been already indicated in our issue of November last. The economic restrictions, which notably hindered the individual farmers from becoming members of the dairy societies; the policy in regard to prices, which paid little heed to the farmers' wishes, and the increase of wages, which in the long run made the co-operative dairies unprofitable, were all elements which concurred to change the collective system of utilizing milk into the individual one. Many co-operative dairy societies have been dissolved and their shareholders have taken up dairying again on their own account and others have been transferred to private persons.

The following figures show the increase or decrease in the number of co-operative dairy societies for each month of the year under review:

Month	Societies formed	Societies dissolved	Increase or decrease
June 1918	8	6	+ 2
July »	8	7	+ 1
August »	2	4	- 2
September »	2	5	- 3
October »	—	9	- 9
November »	3	2	+ 1
December »	2	1	+ 1
January 1919	5	4	+ 1
February »	2	7	- 5
March »	2	11	- 9
April »	9	15	- 4
May »	7	7	0
Total . . .	50	76	+ 6 - 32 = - 26

We have therefore 50 societies formed and 76 dissolved during the year under consideration. The total number of co-operative dairy societies diminished by 26 and on 1 June 1919 it was 3,562, representing about one eighth of all the agricultural cooperative societies (30,845). The States containing the largest number of co-operative dairy societies were Prussia (2,005), Bavaria (571), Württemberg (383), Mecklenburg-Schwerin (139) and Baden (114). Schwarzburg-Rudolfstadt had only one and there were none in the principality of Reuss (Elder Branch).

As regards the form of liability adopted, the co-operative dairy societies were divided as follows : 2,307, or 64.8 per cent., were based on unlimited liability; 1,185, or 33.2 per cent, on limited liability, and 70 on liability to make unlimited supplementary payments.

Of the 3,562 existing co-operative dairy societies 2,272 belonged to the National Federation; of these last, 2,030 or 89.3 per cent., furnished returns of their working. In this year's statistics the Posnanian I and Alsace-Lorraine Federations are no longer included, in consequence of their separation from Germany, nor are there reports of the Rhenish Prussia III Federation. This year's total results of the National Federation are not, therefore, strictly comparable with those of previous years, all the more so as the number of societies which have furnished returns has varied greatly from year to year. Such comparisons and deductions can only be made very roughly.

As to the number of members, 1,950 co-operative dairy societies had 211,889 members and 72,526 suppliers who were not members, these latter representing about 27 per cent. of the total number of suppliers. In 1918 the non-member suppliers numbered 24 per cent of the total number. The average number of members for each dairy rose, for the whole National Federation, from 105 in 1918 to 108 in 1919; many federations,

however, show a decrease in the number of shareholders of co-operative dairy societies. The highest average number of members per dairy is given by Oldenburg and Hesse, with 238 and 246 members.

The Liabilities and Assets of Co-operative Dairy Societies. — The liabilities, the working capital of the dairy societies, include owned capital and borrowed capital. The owned capital, in turn, consists of the share capital and the legal reserves.

The amount of the share capital increased somewhat in the year under review, reaching 6,817,872 marks as compared with 6,146,391 in 1918. The average per society rose from 3,336 marks in 1918 to 3,514 marks in 1919; the average per member remained unchanged at 32 marks.

The reserve funds have increased considerably, rising from 21,905,418 marks in 1918 to 25,999,432 in 1919. We thus have an average per dairy of 14,008 marks as compared with 12,382 in the preceding year, and of 125 marks per member as compared with 121 marks. The total owned capital rose to 32,817,304 marks with an average per dairy and per member of 17,522 marks and 157 marks respectively, as compared with a total owned capital of 28,051,737 marks in 1918 and an average of 15,718 marks per dairy and 153 marks per member. The largest amount of owned capital belonged, as in the previous year, to the co-operative dairy societies of the former kingdom of Saxony where the average was more than three and a half times as high as the general average for the Empire.

The smallest amounts of owned capital were again found in southern Germany, in Baden and Bavaria. This partly depends on the size of the dairies, which are large in Saxony and very small in southern Germany, and partly on the existence in Saxony of four large town dairies in Dresden, in Leipzig, in Chemnitz and in Mügeln, which have a great influence on the total figures.

The borrowed capital was more than double the owned capital. It amounted to 68,707,343 marks as compared with 54,607,370 marks in 1918. The ratio between the owned capital and the borrowed capital was thus 32.3 to 67.7, whilst in the year before it was 33.9 to 66.1. The whole working capital amounted to the sum of 101,524,647 marks as compared with 82,659,107 marks in 1918, being an increase of 19 million marks in round numbers. The increase is in this case also to be attributed in the main to the general depreciation of money.

The assets, representing the employment of the working capital, were higher than in 1918, reaching the sum of 98,340,408 marks as compared with 85,602,717 marks; this result may be due, amongst other causes, to the larger number of societies which have given particulars of their working.

The Business Done by the Dairy Societies. — The same importance cannot be attached to the working capital of the dairy societies as is attributed, for instance, to that of agricultural credit societies. The most important factor is the business done; and this depends on the quantity of milk supplied. On this subject 1,722 societies furnished returns and the following table reproduces the figures of the quantity of milk supplied, therein included cream, calculated in terms of milk

TABLE V. — *Quantity of Milk Supplied to the Dairy Societies.*

Federations	1918		1919	
	Number of societies	Kilogrammes or litres	Number of societies	Kilogrammes or litres
East Prussia	22	34,889,871	21	28,447,910
Brandenburg	36	51,654,643	38	45,660,617
Pomerania	137	174,156,890	138	153,288,343
Posen II.	40	23,536,855	33	18,435,941
Silesia I	31	42,347,518	24	24,766,445
Silesia II	16	17,724,648	13	11,877,649
Province of Saxony	270	199,477,298	269	174,606,394
Schleswig-Holstein	97	61,802,585	61	22,428,405
Hanover	112	139,511,871	212	224,240,232
Westphalia	74	98,885,893	73	118,354,238
Kurhessen	15	11,448,527	16	12,342,701
Nassau	2	1,903,714	1	3,192,774
Rhenish Prussia I	71	52,885,164	72	54,995,999
" " II	50	52,305,537	48	54,665,127
Bavaria	116	41,775,066	112	36,848,068
Saxony	17	24,872,299	18	20,979,269
Württemberg	312	68,701,162	318	78,737,197
Baden	95	13,206,856	87	15,258,078
Hesse	27	25,528,847	27	26,058,833
Mecklenburg	112	126,274,785	112	97,507,236
Oldenburg	26	85,689,357	29	72,049,583
Total . . .	1,687	1,348,599,386	1,722	1,283,741,069

From the above table it may be deduced that notwithstanding the fact that the number of societies which supplied particulars was larger for the year under review than for the previous year, the total quantity of milk supplied to the co-operative dairies decreased from 1,348,599,386 litres to 1,283,741,069 litres. Although these figures, as we have already indicated, are not to be unreservedly accepted, the decrease is not without significance as a symptom of the condition of the co-operative dairy societies. Extremely instructive then are the figures which represent the average quantity of milk supplied per society during recent years. It results that in 1914 it amounted to 1,139,120 kilogrammes, in 1918 to 803.695 kilogrammes and, finally, to only 745.494 kilogrammes in 1919. The decrease in relation to the last year before the war was thus 393,626 kilogrammes or 33.6 per cent. This decrease is also accompanied by a diminution of the butter-fat contained in milk during the last year. There are no exact particulars on the matter but if we take, for example, the Federation for the Province of Sax-

ony with 174,606,394 kilogrammes of milk in 1918-19 and with a diminution of the butter-fat contained in it from 3.2 per cent. in 1914 to 3.05 per cent. in 1919, and estimate that 45 units of butter-fat are required on the average to make a pound a butter, it results that the butter produced was less by 58,202 pounds as a result of the diminished fat content.

The milk supplied is either sold by the dairy societies as fresh whole milk or used in making cheese and butter or otherwise employed. Setting aside the quantity of milk employed in miscellaneous uses (which is almost exclusively the whole milk consumed by the staffs of the dairy societies, and which, in comparison to the other uses, has altogether a secondary importance), only the quantity of whole milk sold showed an increase in the year under review. The quantity rose from 164,940,247 kilogrammes in 1918 to 193,748,462 kilogrammes in 1919, an increase of 29 million kilogrammes in round numbers. This increase, however, is in part due to the larger number of dairy societies which have furnished returns: 1,412 as compared with 1,338 in 1918. The sale of fresh milk for the supply of towns was most largely carried on within the territory of the Federation of Rhenish Prussia II where 92.0 per cent. of the dairy societies took part in it, and to the smallest extent in Bavaria, where only 17.7 per cent. of the co-operative dairies engaged in this business.

The manufacture of whole milk cheese, which in the pre-war time was a not insignificant branch of the dairy industry and which grew even during the war, though slowly, at the expense of other branches of that industry, has been much restricted in 1919 by the regulations laid down by the authorities. Though the number of societies which have given particulars was nearly equal (77 in 1918 and 72 in 1919) cheese making diminished from 10,252,955 kilogrammes to 5,350,366 kilogrammes, that is, by half.

The greater part of the milk supplied to the societies is manufactured into butter. As in previous years, so also in 1919 the butter produced decreased from; 41,362,847 kilogrammes for 1,441 societies furnishing returns in 1918 to 39,274,714 kilogrammes for 1,483 societies in 1919. The largest average quantity per co-operative dairy is given by Oldenburg with a production of 92,262 kilogrammes. East Prussia and Hesse come next, but at a great distance, with 46,770 kilogrammes and 45,038 kilogrammes respectively. The lowest average production is given by Württemberg with 10,699 kilogrammes. The average production for the National Federation, has diminished somewhat (from 28,704 kilogrammes to 26,483 kilogrammes) owing to the decrease in the supply of milk and the increase of its disposal as whole milk. The total sales of milk and milk products by 1,279 societies amounted to 384,684,862 marks as compared with 285,658,453 marks by 1,511 societies in 1918. However, the increase of the total sales does not reflect the real condition of the co-operative dairy societies, the situation of which, as we have tried to show through the detailed analysis of the single factors of the milk industry, seems very unfavourable and threatens to be chronically so.

Financial Results of the Co-operative Dairy Companies. — In the year under review particulars of their financial results were given by 1,968 dairy

societies. The information given shows that 255 societies, or 13 per cent., closed their accounts with an average loss of 2,336 marks; 1,440, or 73.1 per cent, with an average profit of 2,625 marks and 273, or 13.9 per cent, without either profit or loss. These results could not be called unfavourable if the money in which they are set forth had not been so greatly depreciated as a result of the war and of the war economy.

§ 6. MISCELLANEOUS CO-OPERATIVE SOCIETIES.

Numerical increase. — If for 1919 co-operative dairy societies show an unprecedented decrease in number, the miscellaneous co-operative societies on the contrary showed during the same year the largest increase they have ever had, an increase of 510 societies. Given setting aside the war years, when the progress of the miscellaneous co-operative societies was retarded, as we pointed out in the article on the development of agricultural co-operation during the war years, published in our issue of January-February of this year, such rapid progress had never been reached by the miscellaneous co-operative societies, even in pre-war years. The greatest previous increase took place in 1912-13, when it amounted to 487 societies, that is 23 less than the increase in 1919. The following is table shows the societies formed and dissolved in each month :

Month		Societies formed	Societies dissolved	Net increase
June	1918	27	7	20
July	»	44	11	33
August	»	38	12	26
September	»	31	11	20
October	»	51	12	39
November	»	52	14	38
December	»	35	10	25
January	1919	55	11	44
February	»	54	12	42
March	»	82	20	62
April	»	87	25	62
May	»	100	11	99
Total . . .		666	156	510

From January, as we see, the number of societies formed perceptibly increases. On the other hand the societies dissolved are also very numerous in this group representing almost one fourth of the number formed. Such a proportion was not met with in the case of the credit societies, of which 647 were formed and only 42, or about one fifteenth, were dissolved, nor in the case of the co-operative societies for purchase and sale, for which

the corresponding figures were 217 and 13, or about one seventeenth. Probably the explanation is that we are here dealing with societies which were not formed as the result of an economic necessity. This is particularly the case with the societies for the supply of electricity. Of the total increase, more than five sixths (that is 441 societies) belonged to this last group. The remaining 69 societies were distributed amongst the vine-growers' societies, and the societies for the sale of live stock, for the sale of fruit, for the storage of grain, for milling, etc. The total number of miscellaneous co-operative societies amounted to 5,175, which is about one sixth of all the agricultural co-operative societies (30,845). Prussia had 3,724; Bavaria followed with 614, Mecklenburg-Schwerin with 161, Baden with 108, Württemberg with 100 and so on in decreasing order.

As regards the form of liability adopted 4,091 societies, or 79.1 per cent, (as compared with 76.7 per cent. in 1918) had adopted limited liability, which in this case is the more important form, much more so even than in the case of the co-operative societies for purchase, of which only 56.8 per cent. adopted limited liability. The high percentage chiefly depends on the fact that limited liability is adopted by the co-operative societies for the supply of electricity, which are the most numerous in the group. Unlimited liability was adopted by 1,066 co-operative societies, that is 20.6 per cent. as compared with 22.9 per cent. in the previous year, and finally 18 co-operative societies or 0.3 per cent adopted the system of liability to make unlimited supplementary payments, as compared with 0.4 per cent. in 1918.

In the year under review, returns were furnished by 2,194 miscellaneous co-operative societies as compared with 2,099 in 1918: first came the societies for the supply of electricity, of which 721 furnished returns, as compared with 698 in 1918, the co-operative societies for the sale of live stock (132 as compared with 104 in 1918) and the ploughing and threshing societies (254 as compared with 241 in 1918).

Capital of Miscellaneous Co-operative Societies. — Table VII (p. 248) shows the amount of the liabilities and the owned capital, in absolute figures and as a percentage, of 24 different kinds of co-operative society.

As may be seen by the Table VII, the total working capital of the 2,021 societies which furnished returns amounted to 16,3102,393 marks. The owned capital, amounting to 43,969,778 marks, represented 27 per cent. of the total. The most favourable relation between the owned capital and the borrowed capital was found amongst the societies for the sale of spirit, in which the owned capital was 75.6 per cent. of the total capital, as compared with 58.3 per cent. in the previous year. The sugar factories which in 1918 occupied the first place with owned capital representing 77.6 per cent. of the total capital remained in 1919 much below the average, the percentage having fallen to 17.5. In like manner the societies for the sale of fish (18.9 per cent.) were below the average, as also were the societies for the storage of grain (18.3 per cent.), the building societies (16.4 per cent.), the vine-growers' societies (13.2 per cent.) and the societies for the removal of refuse (10.1 per cent.).

Notes on Some Groups of Societies. — As we have already said, the

TABLE VII. — *Total Working Capital and Owned Capital of the Miscellaneous Co-operative Societies.*

Kind of society	Number of societies which furnished returns	Total working capital	Owned capital	Owned capital expressed as a percentage of total capital
		Marks	Marks	
Societies for the storage of grain . .	28	12,983,752	2,377,140	18.3
Milling societies	19	3,178,382	1,822,586	52.4
Societies for distilling	60	4,589,921	2,646,319	57.7
Societies for the sale of spirit . .	5	836,341	632,172	75.6
Starch factories	9	5,267,513	2,965,413	56.3
Sugar factories	3	1,913,319	335,442	16.5
Societies for the sale of fruit and vegetables	68	10,112,159	2,998,041	29.6
Societies for the dessication of potatoes	54	9,925,624	3,188,875	32.1
Vine-growers' societies	144	32,510,268	4,321,440	13.2
Societies for the cultivation of flax .	5	2,237,808	455,007	20.3
Live stock breeding societies . . .	170	2,189,738	98,690	36.5
Societies for the breeding of poultry and sale of eggs	132	7,841,439	3,009,409	38.4
	68	621,838	152,828	24.6
Societies for the sale of fish . . .	103	4,365,077	962,170	22.0
Societies for the use in common of pasture land	5	31,681	17,501	55.2
Societies for the sale of honey . . .	8	1,654,975	313,302	18.9
Societies for the supply of electricity	715	45,844,218	13,299,297	29.1
Ploughing and threshing societies .	250	5,655,659	1,680,173	29.7
Water supply societies	123	1,664,474	284,391	17.1
Building societies	28	8,225,476	1,348,581	16.4
Societies for the removal of refuse .	3	146,207	14,837	10.1
Motor societies	11	282,543	173,390	61.3
Brickmaking societies	4	431,286	111,837	25.9
Societies for the supply of acetylene gas	6	292,665	60,937	20.8
Total	2,021	136,102,398	43,969,778	27.0

number of new *societies for the supply of electricity* was extraordinarily high. In 1919, however, the formation of new societies was not due to real necessity, but, in part at least, in consequence of private initiative which often was not in keeping with a sound co-operative development. Such co-operative societies were not promoted by authorized federations, but sprang up as independent societies and, as such, did not benefit by the advice on any federation. In the year under review, 721 electricity supply societies had 46,365 members, assets amounting to 46,513,738 marks, and liabilities amounting to 45,844,218 marks, while the net profits were 669,520 marks.

The *societies for the sale of live stock* were much hindered in their development by the economic restrictions. In this group a remarkable number of new societies was registered in 1916, but the new societies either have not been able to begin working or have begun working as societies for purchase and sale. All the same, this class of societies, as well as the societies for the desiccation of potatoes, have before them, in the future, an important sphere of action. In the year under review 132 societies for the sale of live stock had 41,477 members, assets amounting to 7,920,801 marks and liabilities amounting to 7,841,439, while the net profits amounted to 79,362 marks.

For the *vine-growers' societies* circumstances were very favourable during the years of the war. Owing to the impossibility of importing foreign wines the home products sold easily at higher prices, to the advantage of the vine-growers and consequently of their co-operative societies. They numbered 114 in 1919 and had 6,906 members, assets amounting to 33,176,753 marks and liabilities amounting to 32,510,268 marks, while the net profits amounted to 666,485 marks.

The *societies for the sale of fruit and vegetables* have considerable importance, as, apart from the fact that they promote the increase and improvement of vegetable-growing, they can secure a large market, Germany being now compelled to rely upon its own production to meet the needs of its population to a much larger extent than in before the war. In 1919, 68 co-operative societies for the sale of fruit and vegetables had 6,051 members, while their assets and liabilities were respectively 11,218,879 marks and 10,112,159 marks, and net profits 1,106,720 marks.

The *societies for the sale of eggs* were impeded in their development both during the war and after. As long as there were restrictions in regard to the sale of eggs, notwithstanding that they possessed experience and the necessary equipment, they were only partly employed. As soon as the restrictions were removed, which happened unexpectedly and without previous consultation with the representatives of the co-operative societies, private trade rendered co-operative trade rather difficult. In 1919, 68 societies for the sale of poultry and eggs numbered 11,445 members, and had assets amounting to 648,666 marks and liabilities to 621,838 marks and made net profits amounting to 26,828 marks.

In the year under review 254 *ploughing and threshing societies* num-

bered 5,676 members. Their assets amounted to 5,710,096 marks, their liabilities to 5,655,659 marks, and net profits to 54,437 marks.

Eighty five *societies for distilling* had 2,193 members in 1919, while their assets and liabilities were respectively 4,677,401 marks and 4,589,921 marks, and their net profits 87,480 marks.

These few particulars may be enough to give some idea of the situation of the chief groups of miscellaneous co-operative societies. In future the National Federation will give fuller statistics of these societies.

Financial Results of the Miscellaneous Co-operative Societies. — Table VIII shows the financial results of the various classes of miscellaneous societies during the year under review.

TABLE VIII. — *Profits and Losses of Miscellaneous Societies.*

Kind of society	Profits		Losses	
	Number of societies	Amount in marks	Number of societies	Amount in marks
Societies for the storage of grain . .	25	454,462	2	1,052
Societies for distilling	37	140,896	17	53,416
Societies for the sale of spirit	5	49,287	—	—
Starch factories	6	51,489	2	24,147
Sugar factories	2	473,051	—	—
Societies for the sale of fruit and vegetables	59	1,109,767	7	3,047
Societies for the desiccation of potatoes	44	661,155	8	68,447
Vinegrowers' societies	113	668,164	1	1,679
Societies for the cultivation of flax .	5	443,319	—	—
Societies for the breeding of live stock	120	203,425	41	21,604
Societies for the sale of live stock .	101	246,709	26	167,347
Societies for the sale of poultry and eggs	57	28,902	8	2,074
Societies for the sale of fish	8	37,851	—	—
Societies for the supply of electricity	333	869,012	351	199,492
Societies for the use of agricultural machines	139	208,883	90	154,446
Societies for the use in common of pasture land	76	155,628	20	21,892
Societies for the sale of honey . . .	4	19,881	1	90
Milling societies	10	24,929	9	153,931
Building societies	19	58,188	10	60,406
Societies for the removal of refuse .	2	955	1	22,111
Motor societies	7	3,122	4	38,652
Brickmaking societies	2	568	1	2,049
Societies for the supply of acetylene gas	2	1,422	3	8,207

As results from the preceding table, the following groups of societies may be said to have had favourable financial results: societies for the storage of grain, societies for the sale of spirit, sugar factories, societies for the sale of fruit and vegetables, societies for the desiccation of potatoes, vine-growers' societies, societies for the cultivation of flax, societies for the sale of fish, and societies for the sale of honey. Six classes of societies closed their yearly accounts with a loss: milling societies, building societies, societies for the removal of refuse, motor societies, brickmaking societies and societies for the supply of acetylene gas. Finally, we have had an uncertain result for eight other classes of society, societies for distilling, starch factories, societies for the breeding of live stock, societies for the sale of live stock, societies for the sale of poultry and eggs, societies for the supply of electricity, threshing societies, societies for the use of agricultural machines and societies for the use in common of pasture land. Comparing these results with those of the previous year the chief differences for 1919 are those relating to the societies for the desiccation of potatoes and the building societies, which figured amongst the societies which had uncertain results whilst now the former have passed into the group of those which have had favourable results and the latter figure amongst those with unfavourable results.

* * *

To sum up, the following conclusions may be drawn: Strong development of the credit societies in regard to their very important function as centres for the collection of agricultural savings. Increase of societies for purchase and sale and, side by side with a decrease in their business, a tendency, such as was noticeable before the war, to devote themselves more to purchasing than to selling. Continued and aggravated crisis in the business of the dairy societies and finally, brisk development of the miscellaneous societies. These are the chief characteristics of the agricultural co-operative movement during the year 1918-19.

NORWAY.

AGRICULTURAL CO-OPERATION FROM 1914 TO 1919.

SOURCES :

- OVERAAE (Hans) : Samvirke foretagender i Norge. En kort oversigt over disse for aaret 1914 (*Co-operative Undertakings in Norway. Short Review for 1914*). Separatavtryk av Det Kgl. Selskap for Norges Vels aarsberetning (*Extract from the Year Book of the Royal Society for the Welfare of Norway*). Kristiania, O. Frødr. Ainesens bok og akcidenstrykkeri, 1916.
- Do. : Samvirke foretagender i Norge 1915 (*Co-operative Undertakings in Norway, 1915*). Kristiania, 1917.
- Do. : Samvirke foretagender i Norge IV (1916) or V (1917) (*Co-operative Undertakings in Norway IV [1916] and V [1917]*). Kristiania, Grøndahl og Søn's Boktrykkeri 1919.
- Do. : Samvirket i Norge (*Co-operation in Norway*). Sociale Meddelelser (*Social Communications*), 1920, No. 5. Kristiania, i Kommission hos Steenske Forlag, 1920.
- Do. : Samvirke foretagender i Norge 1919 (*Co-operative Undertakings in Norway, 1919*) Tidsskrift for det Norske Landbruk, XXVIII, I. Kristiania, January, 1921.

In our issue of August 1916 we published an article giving a review of the rise and early development of agricultural co-operation in Norway. We now publish a continuation of this article, but it cannot be so complete, as certain forms of co-operation are not referred to in the more recent sources as for example the co-operative societies for the sale of butter, co-operation for the supply of milk to large towns and the so-called "Farmers' House."

Others have disappeared in the course of the war ; this is notably the case in regard to co-operation for the export of butter.

§ I. CO-OPERATIVE SOCIETIES FOR PRODUCTION AND SALE

A. — *Dairies and Cheese Factories.*

Table I (page 253) shows the number of co-operative dairies and cheese factories and their distribution among the different departments

As shown in Table II (page 254), the production has not diminished in proportion to the considerable diminution in the number of societies. On the other hand, though there has been a considerable increase in the capital required by these undertakings, it must not be concluded that this is a sign of a great economic improvement, for the value of money has fallen in about the same proportion.

B. — *Societies for the Sale of Butter.*

In the north of the country, the means of communication are too scanty and the distances too great for the milk to be taken to the factories. Each week, therefore, on a fixed day the peasants take the butter which they have themselves made to the premises of the society. Here it is again worked and blended into uniform lumps. By this means, a higher price is obtained for it.

TABLE I. — *Number of Co-operative Dairies and Cheese Factories in Various Years.*

Departments	1855	1860	1865	1870	1875	1880	1885	1890	1895	1900	1905	1910	1914	1918	1919
Akershus	—	1	1	2	2	6	12	20	30	39	40	45	56	65	31
Ostfold	—	—	—	2	2	6	14	17	18	17	21	21	28	35	65
Hedmark	1	—	—	—	3	13	18	18	16	16	20	19	25	20	19
Oppland	—	—	1	3	12	21	32	37	40	35	23	23	24	30	35
Buskerud	—	1	2	1	6	10	21	27	31	40	36	36	35	34	32
Vestfold	—	—	2	3	7	18	28	32	37	42	27	24	16	32	33
Telemark	—	—	1	1	3	4	4	8	14	29	17	12	16	12	10
Aust-Agder	—	—	—	—	—	—	1	1	2	8	6	7	7	4	4
Vest-Agder	—	—	—	—	—	—	—	1	7	18	14	10	10	12	13
Rogaland	—	1	—	—	—	3	6	11	14	17	21	30	38	32	32
Hordaland	—	—	—	—	—	3	3	7	43	69	63	59	65	26	21
Sogn og Fjordane	—	—	—	—	3	—	—	1	15	58	64	74	83	5	8
Møre	—	—	—	—	—	—	—	5	87	151	118	100	100	6	11
Sør-Trøndelag	—	—	—	—	—	6	24	25	56	60	64	55	50	35	41
Nord-Trøndelag	—	—	—	—	1	19	23	46	51	74	67	57	55	39	35
Nordland	—	—	—	—	—	—	—	1	6	58	56	42	52	11	16
Troms	—	—	—	—	—	—	—	—	2	3	4	4	6	5	8
Total	1	3	7	12	39	106	186	257	469	734	661	618	666	403	414

TABLE II. — *Number of Dairies and Cheese Factories and Business Done by them.*

Year	Dairies and cheese factories which furnished returns	Quantity of milk supplied	Price paid
		kilogrammes	crowns
1914	620 (2)	222,324,700	25,037,675
1915	569	227,669,709	29,258,360
1916	616	238,189,400	43,829,600
1918 (1)	c. 400	198,552,400	50,546,800
1919	414	176,781,800	80,403,040

(1) The figures for 1917 are not available. (2) Comparing this figure with the figure given in Table I, it will be seen that about 46 dairies and cheese factories failed to furnish returns.

In regard to these societies, statistics are available for 1916, and these we give in Table III.

TABLE III. — *Societies for the Sale of Butter in 1916.*

Name	Number of members	Number of cows	Butter sold	
			Quantity kilogrammes	Value crowns
Løvdalens	30	142	5,796	15,46
Kroken	74	73	5,374	15,28
Rosfjord	23		1,600	4,44
Nordreisa	30	100	1,747	4,75
Grastangsbotn	38	175		
Roberg	44		1,028	3,20
Stensland	24	90	1,724	5,20
Larangen	41	140	1,032	4,32
Fastlandets	35	170	4,500	12,00
Ytre Skjelven	25	60	3,140	8,70
Nedre Maalselven	155		10,413	28,83
Grønæs	23	80	810	2,40
Maalselven	100		7,000	18,00
Breivoll	30	60	1,700	5,00
Ovre Bardu	68	245	5,507	17,93
Mortenbals	30	150	1,800	5,60
Maalselv Mellenbygd	35		2,546	6,86
Sæmhald	36	150	3,022	8,72
Ringsløens	40	140	2,838	7,53
Sandøens	46		3,166	8,63
Hattfjeldalen	59	228	2,677	8,24
Total	986		65,020	191,53

C — Co-operative Slaughterhouses

The co-operative slaughterhouses in Norway also take steps to increase the number and improve the quality of the live stock of their members, and purchase on their behalf in-calf cows and young pigs

In 1914 there were two societies of this kind the *Faelleslagteriet* at Christiania and the *Hamarslagteriet*. The latter ceased business after 1916

On the other hand, in 1915, 1917 and 1919, new co-operative slaughterhouses were formed at Skien, Kristiansand and Vestfold respectively. The number of members and the business done are shown in Table IV. For 1918 only the total figures are available, on 31 December of that year the number of members was 12,802 and the turn-over during the year amounted to 11,206,068 crowns

TABLE IV — Co-operative Slaughterhouses

Name	Number of members	Turnover (crowns)	Number of members	Turnover (crowns)	Number of members	Turnover (crowns)
	1913		1914		1915	
1 Faelleslagteriet	5,513	2,195,312	6,830	2,652,090	7,560	1,536,311
2 Hamar	—	—	7,301	3,002,090	,101	351,697
3 Skien	—	—	—	—	—	—
4 Kristiansand	—	—	—	—	—	—
5 Vestfold	—	—	—	—	—	—
	1916		1917		1919	
1 Faelleslagteriet	—	1,958,551	8,307	6,968,699	8,633	1,900,755
2 Hamar	,101	118,921	—	—	—	—
3 Skien	1,095	529,159	1,130	1,573,176	1,500	1,610,355
4 Kristiansand	—	—	2,815	(1) 501,720	3,611	2,095,712
5 Vestfold	—	—	—	—	—	1,100,000

(1) From 15 June to 31 December

§ 2 SOCIETIES FOR THE PURCHASE OF AGRICULTURAL REQUISITES

In Table V are given figures relating to the work between 1915 and 1919 of the societies for the purchase of agricultural requisites. As will be seen, the rise in prices has caused a considerable increase in the expenses

TABLE V. — *Societies for the Purchase of Agricultural Requisites, 1915 to 1919.*

	1915	1916	1917	1918	1919
Turnover (crowns)	19,503,254	20,957,706	43,995,013	68,777,671	58,665,624
Gross profits (crowns).	1,169,696	2,213,390	3,204,483	4,138,085	4,323,047
Profits expressed as percentage of the turnover	5.9	10.5	7.3	6.0	7.4
Expenses (crowns)	632,173	1,029,275	1,738,918	2,912,040	3,303,173
Expenses expressed as percentage of the turnover	3.2	5.0	3.9	4.3	5.6
Increase of capital (crowns) . .	350,973	524,896	795,321	1,176,075	1,019,874
Owned capital (crowns)	1,417,613	1,912,519	2,737,840	3,921,429	4,255,886
Due for goods supplied (crowns)	3,419,636	3,716,909	6,216,245	12,775,751	12,706,098

§ 3. SOCIETIES FOR THE SALE OF AGRICULTURAL PRODUCE.

A. — *Societies for the Export of Butter.*

For these societies a few figures are available for 1915 and 1916. Since the latter year their work has ceased, as the State took over the control of all export trade.

Of seven societies for the export of butter which were still working in 1915 only three had any considerable turnover. These three sold a total of 326,308 kilogrammes of butter representing a total value of 902,353 crowns. In 1916, only two furnished returns; they had a total turnover of 289,807 crowns.

B. — *Societies for the Sale of Eggs.*

Since the beginning of the war, the work of these societies has steadily diminished.

While in 1914 there were 40 of these association of which 27 furnished returns the number furnishing returns diminished from year to year. It was, in fact, 20 in 1915 and 1916, 18 in 1917, 8 in 1918, and 5 in 1919. Figures relating to the working of these societies are given in Table VI (page 257).

C — *Societies for the Sale of Wood.*

The co-operative societies for the sale of wood, which were not yet very firmly established in the early years of the war, were seriously affected by the exceptional circumstances of those years. Later, however, they completely recovered their position, as will be seen from Table VII (page 257).

TABLE VI. — *Work of the Co-operative Societies for the Sale of Eggs.*

Year	Number of members	Eggs delivered to the depôts		Price per kilogramme	Eggs delivered to the depôts	
		Weight	Value		Weight	Value
		kilogrammes	crown	crown	kilogrammes	crown
1912	1,630	252,824	298,017	1 18	155 0	182 8
1914	1,773	332,009	391,801	1 18	107.0	220.9
1915	1,784	296,457	434,696	1.45	106.0	243.6
1916	1,355	217,864	466,667	2 14	100 8	344.4
1917	1,493	207,201	570,345	2 75	138 9	382.00
1918	691	70,210	350,591	4 89	104 5	504 45
1919	430	16,561	93,032	5 61	38.5	216 35

TABLE VII. — *Societies for the Sale of Wood.*

Year	Societies furnishing returns	Turnover		Price per dozen (crown)
		Trces (dozens)	Value (crown)	
1912-13	—	—	2,621,430	—
1913-14	—	133,521	3,141,937	—
1914-15	25	87,979	2,019,072	22.50
1916	13	22,115	5,520,979	25.00
1917	40	376,922	10,945,432	45.00
1918	—	—	—	—
1919	33	116,106	8,713,799	73 00

The remarkable fall in the turnover in 1919 is probably due in part to the diminution which took place in the building of ships, and in part to the failure of important societies to furnish returns, but the sources at our disposal do not enable us to estimate in what respective degrees.

§ 4. CO-OPERATIVE DISTRIBUTIVE SOCIETIES.

Table VIII (page 258) shows the increase in the number of co-operative distributive societies, in the country and in the towns, since 1870.

For the years 1907 to 1915 we are able to give detailed statistics concerning the Union of Agricultural Co-operative Societies of Norway (*Norges Kooperativ Landsforening*). They will be found in Table IX (page 259).

TABLE VIII. — Number of Co-operative Distributive Societies formed at Different Periods in the Country and in the Towns.

Departments	1870 to 1879		1880 to 1889		1890 to 1899		1900 to 1909		1910 to 1918		Date unknown		Total societies on 31-12-18		Formed between 1914 and 1918	
	Total		Total		Total		Total		Total		Total		Total		Total	
	Admitted to the N. K. L. (1)	Admitted to the N. K. L.	Admitted to the N. K. L.	Admitted to the N. K. L.	Admitted to the N. K. L.	Admitted to the N. K. L.	Admitted to the N. K. L.	Admitted to the N. K. L.	Admitted to the N. K. L.	Admitted to the N. K. L.	Admitted to the N. K. L.	Admitted to the N. K. L.	Admitted to the N. K. L.	Admitted to the N. K. L.	Admitted to the N. K. L.	Admitted to the N. K. L.
O.-fold	2	—	2	1	1	—	+	2	11	1	3	—	26	7	7	2
Akershus	3	0	1	1	2	0	6	4	11	10	2	0	43	15	8	7
Hedmark	1	0	0	0	0	0	8	4	34	26	0	0	30	30	18	16
Oppland	0	0	0	0	0	0	5	3	10	8	3	0	24	11	12	4
Burkerud	4	0	3	0	2	1	16	10	16	10	12	0	53	15	21	9
Vestfold	2	0	2	0	0	0	5	1	8	3	4	0	18	7	5	2
Telemark	4	0	0	0	0	0	13	0	17	2	1	0	47	2	9	1
Austagder	1	0	0	0	6	0	2	0	5	0	3	0	17	0	1	0
Vestlagder	0	0	0	0	2	0	4	1	8	1	1	0	15	2	4	1
Rogaland	0	0	0	0	0	0	11	1	16	2	3	0	33	4	7	0
Hordaland	10	0	1	0	4	0	15	0	25	1	5	0	60	1	11	1
Sogn og Fjordane	3	0	0	0	1	0	2	0	5	0	1	0	12	0	1	0
Møre	2	0	0	0	2	0	9	0	17	4	8	0	38	4	10	3
S. Trøndelag	3	0	0	0	13	3	7	4	36	25	11	0	70	32	24	18
N. Trøndelag	2	0	3	1	0	0	4	0	9	8	2	0	20	10	6	5
Nordland	0	0	0	0	0	0	8	1	15	12	2	0	25	13	11	7
Troms	0	0	0	0	0	0	6	1	8	6	—	0	14	7	6	5
Finnmark	0	0	0	0	0	0	0	0	2	2	0	0	1	2	1	1
Total: In the country	37	0	12	3	42	4	128	32	262	124	61	0	542	162	162	82
„ „ towns	—	—	3	1	1	1	11	6	28	23	9	0	52	31	18	14
„ „ whole of Norway	37	0	15	4	43	5	139	38	290	147	70	0	594	193	180	96

(1) The *Norges Kooperative Landsbank* (Union of the Agricultural Co-operative Societies of Norway) is the most important association of this kind. It has a tobacco factory, a margarine factory and a credit bank.

The particulars relating to the rural societies, for the years 1916 to 1919, may be summarized as shown in Table X.

TABLE X. — *Rural Co-operative Distributive Societies, 1916 to 1919.*

	1916	1917	1918	1919
Number of rural societies	575	522		617
Number of societies which furnished returns	248	256	233	275
Number of members on 31 December	33,112	41,997	41,912	46,318
Capital employed (crowns)	1,157,321	2,121,430	2,502,098	3,081,693
Reserve fund	1,903,825	2,591,780	3,387,286	3,831,016
Turnover	26,852,269	42,212,030	45,133,333	61,917,171
Profit	1,256,265	2,406,510	2,121,645	2,915,749
Rate of profit	4.6	5.7	5.1	4.5

MISCELLANEOUS INFORMATION RELATING TO CO-OPERATION AND ASSOCIATION.

BULGARIA.

THE BULGARIAN AGRICULTURAL UNION. — *Echo de Bulgarie*, Sofia, 18 March, 1921

The idea of an agricultural organization in Bulgaria dates back to 1890, but its realization had to meet many obstacles and progress was slow.

The promoters tried to set up in each village an agricultural association, containing at least ten members. All the groups of one district formed the district agricultural association; all the district associations formed a departmental association and finally the delegates of all the agricultural associations met in an annual congress.

According to the rules of the union the only persons who are eligible for membership of an agricultural association are farmers; persons who have received diplomas from agricultural schools; teachers of agriculture or of one of its branches; priests who interest themselves in agriculture or one of its branches; agricultural experts; professors of agricultural schools; forest keepers; veterinary surgeons or veterinary assistants.

The members of each association must pay a lev a year for the support of the union. They pay also a contribution to the village associations as well as to the district and departmental associations in the proportion fixed by these associations themselves.

The object of the agricultural association is to organize all the farmers of the village and to teach them to work according to the maxim "one for all, all for one"; to contribute in every way to the advancement of agriculture, as well as to the intellectual, moral, political and economic training of its members and of all agriculturists. One of the most important ways by which the associations attain their object is by means of the meetings which they arrange.

According to the rules of the union each association must hold at least 36 meetings a year. At these meetings the association discusses one of the following subjects: the programme of work to be carried out in accordance with the spirit of the resolutions passed by the union and by the congresses; the propagation of the journal and other publications of the union; the establishment of libraries and reading rooms; the organization of evening parties and theatricals, the study of the laws promulgated and the examination of bills introduced; the discussion of methods whereby agriculture may be improved, the promotion of charitable societies; the reconciliation of members of the association, participation in municipal, departmental and parliamentary elections; protests against arbitrary acts of public functionaries and in general against all harmful measures, the means whereby the material prosperity of the union and of the association may be insured, the formation of new associations in the neighbouring villages and districts; the formation of co-operative banks, co-operative distributive societies and co-operative productive societies; the repression of intemperance; the study of different types of rural dwellings; sanitation; compulsory attendance at the school examination at the end of the year and the organization of suitable ceremonies; the limitation of wedding expenses; the suppression of round dances and of evening gatherings; reports presented by delegates as to the manner in which they have accomplished their charge; the rational use of public waters; assistance to indigent peasants, school children, orphans, disabled, and widows; the construction and maintenance of roads and canals, the closing of public-houses in the country; the opening of coffee houses, inns, etc., in connection with co-operative societies; the erection of schools and other buildings of public utility plans and estimates for the villages; the preparation of the budget of the commune; the cultivation of communal and church lands; the maintenance of public lands; the organization of lectures on agricultural subjects and on domestic economy for the peasants; the institution of courts of conciliation; the drawing up of labour agreements and the relations between servants and workers and their employers, compulsory primary and higher primary education.

At the beginning of their existence the agricultural associations passed through serious crises. Their number sometimes increased and sometimes diminished. More than one association was obliged to dissolve and to start again several times before attaining a permanent existence. In 1899 there were 400 agricultural associations in Bulgaria; the following year there was not more than the half left; their number fell even to 73 in 1901 and to 30 or 40 in 1903. Between 1904 and 1909 their number rose again to

90; there were 137 in 1906, 410 in 1907, 1,112 in 1908. There are to-day 3,000, which means that almost every village has its agricultural association.

FRENCH COLONIES.

CO-OPERATIVE AGRICULTURAL CREDIT IN THE COLONIES OF GUADELOUPE, MARTINIQUE AND RÉUNION. — DÉCRET DU 31 DÉCEMBRE 1920 RELATIF À L'ORGANISATION DES CAISSES RÉGIONALES DE CRÉDIT AGRICOLE DANS LES COLONIES DE LA GUADELOUPE, DE LA MARTINIQUE ET DE LA RÉUNION.

It has been decided by a decree dated 31 December 1920 that in each of the colonies of Martinique, Guadeloupe and Réunion, a regional mutual credit bank shall be formed with the following objects :

(1) To facilitate operations relating to agricultural production carried out by the members of the local mutual credit societies and guaranteed by these societies ;

(2) To facilitate similar operations carried out by co-operative agricultural societies regularly affiliated to a local mutual agricultural credit society ;

(4) To make long term individual loans with a view to facilitating the acquisition, equipment, transformation and reorganization of small farms.

With these objects, the regional bank will discount the bills signed by the members of the local societies and endorsed by those societies ; it can make the advances to these societies necessary for the formation of a working capital ; lastly it can grant individual long term loans to the members of these societies. On the other hand, it will be forbidden to do any other class of business.

There will be placed at the disposal of each of the local governments of Martinique, Guadeloupe and Réunion, in the form of loans free of interest and in accordance with their duly ascertained needs, in each of the regional banks which will be formed in these colonies :

(1) A contribution of 500,000 francs, paid to the State by each of the Banks of Martinique, of Guadeloupe and of Réunion in accordance with article 15 of the Law of 21 March 1919 by which their privileges were renewed :

(2) An annual payment made by these banks ;

(3) The sums which may be voted in the budget of the colony for the purpose of developing agricultural credit or which may be placed in any other way at the disposal of the local government for the same object.

The amount of the advances made to the regional bank for its ordinary operations must not exceed double the amount of its paid up capital. Such advances must not be made for longer periods than five years, but may be renewed. In addition, special advances, also without interest, may be made to the regional bank, to enable it to make individual long term loans, provided that at the moment when its application is made, the bank has still 20 years of existence in front of it. Such advances must not exceed the amount of the share capital ; they will be repayable in a maximum period of 20 years.

Other special advances, also without interest, may be made to the regional bank, for the purpose of making loans to agricultural co-operative societies. These advances must not exceed two-thirds of the annual sums payable by the bank to the colony. They will be repayable in a maximum period of 25 years.

The individual long term loans which the regional bank is authorized to make must not exceed 8,000 francs nor be for periods longer than 15 years: they will take the form of mortgage loans, without prejudice to any additional security which the regional bank may demand. The repayment will be made by annual instalments. Lastly, when the loans granted are made for purposes of the equipment and transformation of holdings, the sums will only be advanced according as the work is carried out.

As to the loans to co-operative agricultural societies, they must not exceed twice the paid up capital of the borrowing society.

It may be added that the regional bank will supervise the local banks and will exercise a regular and effective control over their work. It will require the societies to furnish every year vouchers showing how the sums advanced have been used in favour of agriculture, to supply copies of their rules, statements of their operations, detailed accounts of their outstanding debts and loans together with their balance sheets.

FRENCH PROTECTORATE OF MOROCCO

CO-OPERATIVE AGRICULTURAL CREDIT IN MOROCCO — *Journal d'Agriculture pratique*, Paris, 14 May 1921

Co-operative agricultural credit in Morocco owes its existence to a *dahir* (decree) dated 15 January 1919, which authorized the creation of local credit societies making short term loans to their members and agricultural co-operative societies, which may obtain advances from the State. Central banks may be created, with the consent of the government, by one or more local credit societies. The State reserves the right of making advances without interest to these central banks, as well as to the various agricultural co-operative societies.

The application of this decree began with the formation at Rabat of a central bank, authorized by an order of the Resident General dated 28 March 1919. Since that date, the credit societies and agricultural co-operative societies have developed considerably. In October 1920, the loans outstanding amounted to 500,000 francs, and it was decided, at that date, that the special advances account opened by the government should be increased to 1,500,000 francs.

In order that a colonist may obtain a loan from an agricultural credit society, it is necessary that he should really be the owner of the land which he cultivates. The farmers established on allotments sold to them with facilities for payment cannot take advantage of this organization until such time as the definite title-deeds have been handed to them.

Part II: Insurance and Thrift

UNITED STATES.

INSURANCE OF FARM CROPS AGAINST HAIL.

SOURCE (OFFICIAL):

VALGREEN (V. N.); Hail Insurance on Farm Crops in the United States. United States Department of Agriculture. Bulletin No. 912. Washington, 1920.

The United States Department of Agriculture has recently published a Bulletin entitled "Hail Insurance on Farm Crops in the United States" of which we here give a summary.

Hail insurance on growing crops is written in the United States by three different groups of business organizations. These groups are: (1) Mutual hail insurance companies, which, with few exceptions limit their business to the insurance of growing crops against hail; (2) joint-stock fire insurance companies which write hail insurance on growing crops more or less as a side line; (3) State hail insurance boards or departments under whose direction and control are administered State hail insurance funds.

During 1918, the latest date for which State insurance reports were available, these three groups of hail insurance organizations had in force in the United States insurance on growing crops to a total amount of approximately \$318,543,000, on which the premiums amounted to \$17,631,000. The figures for 1919, as ascertained from correspondence with the companies and the State insurance commissioners, as well as from various unofficial published reports, show a remarkable increase, the total risks and premiums being approximately \$559,134,000 and \$30,330,000 respectively.

§ 1. DEVELOPMENT OF MUTUAL HAIL INSURANCE COMPANIES.

The first organization in the United States to write hail insurance on growing crops, so far as official records reveal, was a small mutual concern organized in 1880 by the tobacco growers in Connecticut. This company

ceased to exist in 1887, but was immediately succeeded by another mutual hail insurance company in an adjoining country, which is still doing business. No other companies formed exclusively for hail insurance are shown by official records earlier than the year 1889, in which year four such companies were reported to have been formed in North Dakota.

Although many of the early mutuals were short-lived, by 1900 there were 37 mutual hail insurance companies in existence. Of these one was in Connecticut, 4 were in Wisconsin, 13 in Minnesota, 7 in Iowa, 2 in North Dakota, 7 in Nebraska and 3 in Kansas. The total premiums and assessments collected by these companies in 1900 were approximately \$643,000, and the losses incurred amounted to \$407,000. More than one third of the total hail insurance premiums were reported from Iowa.

In 1905 the total number of mutual hail insurance companies was still 37, those which had dropped out having been replaced by new organizations. The total premiums of these companies during 1905 approached \$800,000 and the losses were approximately half the premiums collected.

By 1910 the number of mutual hail insurance companies had decreased to 28. The total premiums for the year, however, showed a considerable increase, being more than \$1,000,000. The mutual companies were distributed as follows: one in Connecticut, 5 in Wisconsin, 4 in Minnesota, 9 in Iowa, one in North Dakota, 2 in Nebraska, 3 in Kansas, 2 in Oklahoma, and one in Montana.

Two of the Minnesota companies wrote insurance in Kansas and Montana, and one of these also in North Dakota. In later years these same Minnesota companies have been doing business in several states, and a few of the Iowa companies have also been admitted to neighbouring states.

In the five-year period following 1910, the number of mutual companies increased to 39. Their total premiums in 1915 exceeded \$3,336,000 and were thus more than three times the premiums collected in 1910.

In 1915 the losses caused by hail were extremely heavy, and a number of the mutual companies were without adequate reserves. As a result, mutual hail insurance suffered a severe setback, particularly in the State of Kansas. In 1916 only 35 mutual companies were doing business, and the total premiums collected amounted to about two thirds of the premiums collected in 1915. In the three following years, however, the premiums again increased, reaching \$4,775,000 in 1919.

§ 2. CAUSES OF FAILURE OF MUTUAL HAIL INSURANCE COMPANIES.

In the early days of hail insurance but little information existed as to the nature of the hail hazard and its relative severity in different districts. Many of the early mutual companies appear to have been formed on the model of the local farmers' mutual fire insurance companies, without an adequate recognition of the radical difference between the fire hazard in relation to segregated farm buildings and the hail hazard in relation to fields of growing grain. Unlike fire, a hailstorm seldom, if ever, strikes one

farm only ; it resembles in its effects a conflagration in the case of urban fire risks.

The causes of the frequent failure among the early mutual companies cannot be charged entirely to lack of knowledge of the hail hazard. In many cases the failures were due to reckless or unscrupulous promotions, the organizers taking advantage of the general inadequacy of the insurance laws, which were specially lax in regard to mutual companies. Speculative promotions have tended to discredit all mutual hail insurance companies and have constituted a serious handicap to the growth and development of companies organized by men of ability aiming at a real service to their constituents. To a somewhat less extent the same is true of mutual companies which were promoted by men who, while honest and sincere, were lacking in knowledge of the hail hazard or in ability as managers.

As time went on the nature and severity of the hail hazard in the different States became better known. Insurance laws, as well as the administration of these laws, became in general more effective in safeguarding the interests of the policy holders, and farmers to an increasing extent became aware that it is necessary to know something about the men in charge of the mutual organizations as well as to see that the plan on which insurance is offered is a reasonably workable one.

The total number of mutual companies of which record has been found is 121. Of these only 41 companies were in existence at the date of the most recent insurance reports.

Considered by states, the number of mutual hail insurance companies organized and the number now in existence are as follows :

State	Number organized	Number now in existence
North Dakota	13	1
Minnesota	25	7
Iowa	18	6
Nebraska	16	4
Kansas	14	7
Wisconsin	8	4
Oklahoma	9	2
Montana	6	2
Texas	6	3
South Carolina	2	2
Connecticut	1	1
Michigan	1	1
New Mexico	1	1

Of the mutual companies which have ceased to do business, 11 were in existence for one year only, 38 for more than one year but less than five years, while 20 operated five or more years but less than ten.

The approximate ages of the companies now in existence are indicated by the following figures showing the number of these companies which were formed in each of the five-year periods from 1885-89 to 1915-19:

1885-1889 . . . 2 companies	1905-1909 . . . 7 companies
1890-1894 . . . 2 »	1910-1914 . . . 5 »
1895-1899 . . . 6 »	1915-1919 . . . 15 »
1900-1904 . . . 4	

§ 3. JOINT-STOCK FIRE INSURANCE COMPANIES DOING HAIL INSURANCE BUSINESS.

In 1883 one of the larger joint-stock fire insurance companies began to write hail insurance on growing crops in Minnesota. In the following year a small amount of hail insurance was written by this company in what was then the Dakota Territory, in Nebraska and in Kansas. In 1897 the company began to write hail insurance in the State of Iowa and in the Territory of Oklahoma and in 1898 in the States of Wisconsin, Texas and Colorado.

By 1905 another joint-stock company had begun to do hail insurance business, and the total hail insurance premiums collected by the two joint-stock companies in that year amounted to about \$750,000.

At least five joint-stock companies were writing hail insurance by 1910. The total hail insurance premiums received by this class of companies for the year, so far as figures have been obtained, were approximately the same as in 1905, though they exceeded this amount in some of the intervening years.

Between 1910 and 1915 the hail insurance business of the joint-stock fire insurance companies showed a great advance. The number of such companies doing this class of business increased to 35, while their total hail insurance premiums in 1915 amounted to approximately \$6,400,000.

During the years following, the joint-stock companies continued to show rapid progress. Their number increased and their total premiums in 1916 and 1917 exceeded \$8,000,000, while in 1918 they exceeded \$12,850,000 and in 1919 they amounted approximately to \$19,460,000.

§ 4. STATE HAIL INSURANCE DEPARTMENT.

The year 1911 marks the entry into the hail insurance field of the third type of organization mentioned, North Dakota having in that year put into operation its first State hail insurance law, which provided for the writing of this form of insurance through a State hail insurance department.

During the first year of State hail insurance in North Dakota premiums to the amount of \$26,000 were collected, representing risks of slightly more than \$1,000,000. The losses experienced during the year exceeded the premium income, however, by nearly 18 per cent, and the losses as adjusted had to be prorated at 70 per cent. The business during 1912 showed a relat-

ively marked increase; the premiums amounted to nearly \$65,000 and the risks were in excess of \$2,500,000. During this year, however, the losses were nearly one and two-thirds times the total premiums, and for this reason they had to be prorated on a basis of 55 per cent. These experiences discouraged the farmers from taking hail insurance with the State department, and the total business for each of the next six years was less than one-half as great as that of 1912. During each of these years it was found necessary to prorate the losses, the percentage paid being as follows: 1913, 88 per cent.; 1914, 65 per cent.; 1915, 75 per cent.; 1916, 38 per cent.; 1917, 62 per cent.; and 1918, 53 per cent.

The rather discouraging experience on the part of North Dakota with its State hail insurance department under the law as first enacted may be ascribed chiefly to two causes. In the first place, the premium charges provided for in the law were inadequate, such charges for the years 1911 and 1912 having been 20 cents per acre on \$8 of insurance, making a rate of only $2\frac{3}{4}$ per cent. or exactly one fourth of the rate now charged by joint-stock companies in the State. In the spring of 1913 the law was amended so as to make the rate of premium 30 cents per acre on \$8 of insurance, or $3\frac{3}{4}$ per cent, at which figure the rate remained until the complete revision of the law in the spring of 1917. The other outstanding cause of failure of the original North Dakota plan was that applications for insurance had to be made to the assessor in the early spring and the premiums for such insurance advanced at that time, before any crops were actually in existence.

In spite of this apparent failure of state hail insurance in North Dakota, the States of Montana and Nebraska enacted laws providing for State hail insurance departments in the spring of 1917. The Montana department began operations shortly after the law was passed, but no insurance was written by the Nebraska department until the season of 1918. The premiums collected by the Montana department during its first year of operation amounted to \$107,000, and the losses incurred were moderate, being only \$62,000. Although the law permitted a maximum assessment of 60 cents per acre on \$12 of insurance, the department assessed and collected hail premiums of only 40 cents per acre on \$12 of insurance, being at a rate of $3\frac{1}{3}$ per cent. With the funds so collected the department was able to pay its losses, together with expenses of operation, the latter amounting to \$4,700, and to complete the year with a surplus of \$40,000. This favourable beginning of State hail insurance in Montana in 1917 was, however, followed by a very trying experience in 1918. The losses this year were extremely heavy, caused largely by a severe and unusually extensive hail storm just at the time when the wheat was ripe and ready for harvest. The losses as adjusted approximated \$870,000. The maximum levy of 60 cents per acre brought only a little over \$400,000 and this amount, together with the small surplus from the preceding year, was only enough to pay 46 per cent. of the losses.

The Nebraska State hail insurance department during 1918, its first year of operation, collected \$154,260 in premiums. The law in this case

provided fixed rates which varied from 25 cents per acre for the eastern part of the State to 45 cents for the western. The amount of insurance per acre was \$10. The losses during the year proved to be moderate, amounting to only \$127,000, and the total cost of administration was \$6,072. All losses were, therefore, paid in full and the year was closed with a balance or surplus on hand amounting to \$21,128.

During the early months of 1919 the States of North Dakota, Montana and Nebraska materially amended their hail insurance laws. During the same months the States of South Dakota and Oklahoma also enacted laws providing for State hail insurance.

The amended North Dakota law and the law of South Dakota provided what is frequently called "compulsory insurance" although the term "automatic" would seem more accurately to describe the plan. In each of these States every acre of crop is now, without action on the part of the owner, insured against loss or damage by hail the amount being \$7 per acre in North Dakota and \$10 per acre in South Dakota. In the latter State the owner may, however, exempt his land entirely from the operation of the hail insurance law by filing an application for exemption before 1 June of each year. Or he may retain one half of the \$10 insurance per acre and be subject to one half of the indemnity tax. In North Dakota the owner of a growing crop may also exempt it, but even if he does so he must pay an acreage tax of 3 cents per acre to the hail insurance fund.

In North and South Dakota, Montana and Nebraska hail insurance premiums are now collected by the State in much the same way as taxes. In the two latter States, however, the State hail insurance only takes effect upon the application for such insurance by the owner or tiller of the land. The Oklahoma law, which was not operative in 1919, is similar to the Montana and Nebraska laws in providing for strictly voluntary or optional insurance and follows the original North Dakota law in requiring premiums to be paid in advance.

The maximum hail indemnity tax which may be levied in North Dakota under the existing law is 50 cents per acre or $7\frac{1}{2}\%$ per cent. of the insurance.

In South Dakota, where the regular amount of insurance per acre is \$10, a fixed rate is applied for each of four different districts, into which the state is divided, these rates being respectively 35 cents, 40 cents, 42 cents and 45 cents per acre. Such rates are not to be reduced until the department has a surplus or reserve fund of \$2,500,000.

The Montana law provides a uniform maximum limit of assessment for hail indemnity for all parts of the State, such limit being fixed at \$1.20 per acre for \$12 of insurance. This maximum rate was actually applied in 1919 and proved sufficient to pay the cost of insurance and leave a small surplus.

The Nebraska law provides for three hail insurance districts in the State, with fixed rates of 25 cents, 40 cents and 60 cents per acre respectively, when the amount of insurance carried is \$10 per acre. The farmer

may, however, take \$15 per acre at 1 ½ times the rate charged for \$10 per acre. The hail losses in Nebraska during 1919 were heavy, and there was left but a small balance when losses and expenses were paid.

The Oklahoma law provides for the division of the State into four insurance districts. The insured may take any amount of insurance he desires up to \$20 per acre. The rates are 3 per cent., 6 per cent., 7 ½ per cent. and 9 per cent. of the insurance according to the district in which the crop is located.

In each of the three States in which different rates for specified parts of the State are provided, the lowest rates apply to the eastern district and the highest to the western.

The total risks of the four State hail insurance departments in operation in 1919 were approximately \$139,300,000; the premiums, \$6,095,000, and the losses \$4,500,000. Of the total risks, North Dakota had about 62 per cent.; South Dakota 23 per cent.; Nebraska, 14 per cent., and Montana less than 1 per cent. The South Dakota department alone laid aside a surplus from the year's business, this surplus being approximately \$900,000.

§ 5. TERRITORIAL DISTRIBUTION.

Hail insurance in large volume can be written only where there is a large acreage of crops to insure and where at the same time the probability of destructive hailstorms is present in such degree as to make the growers of the crops conscious of the need for protection. These two determining factors coexist in a marked degree in the West North Central States. While from the point of view of acreage in crops subject to damage when hail does occur, a large percentage of the area of about three fourths of the States would be insurable, the hail hazard in a considerable number of these States is relatively so slight as to preclude the taking of any special precaution against loss from this source.

The three states of Kansas, North Dakota and Iowa, ranking in the order given, led all other states in the amount of hail risks in force in 1918. In fact, these three states together had more than half the total hail risks in force in the United States, which was estimated to be \$559,134,000. The approximate amount of risks reported from Kansas was \$116,056,000; from North Dakota, \$99,603,000; from Iowa, \$73,471,000. These amounts represent respectively 21 per cent., 17 per cent. and 13 per cent. of the total risks in the United States. The States of Nebraska, South Dakota and Minnesota follow with risks equal to 9 per cent., 8 per cent., and 6 per cent., of the total respectively. The State of Oklahoma is seventh on the list, with risks equal to 4 per cent. of the total. None of the remaining states had an amount equal to much more than 2 per cent. of the total, and most of them had less than 1 per cent.

§ 6. DISTRIBUTION BETWEEN TYPES OF INSURANCE INSTITUTION.

Of the total risks carried in the United States in 1919, almost exactly half were carried by 43 joint-stock companies, one fourth by 41 mutual companies and one fourth by 4 hail insurance departments.

In the states of Iowa and Minnesota, however, the mutual companies carried the greater part of the total risk, while in North Dakota and South Dakota the greater part was carried by the State hail insurance departments. In Michigan all the hail insurance of which record was found and in the State of Wisconsin all but one tenth was carried by the mutual companies.

§ 7. COST OF HAIL INSURANCE.

In the early days of hail insurance, there was comparatively little knowledge of the hail hazard, and a common rate of premium was 5 per cent. of the insurance written. The variation in the severity of the hail hazard in different states, as well as in different sections of the same state, was soon recognized and the rates were adjusted accordingly. Rates in Minnesota, Iowa, Missouri and states east and south of these were lowered until a rate of 3 per cent. became fairly general for the more common cereal crops in this territory. West and south of the states named, however, rates were gradually advanced for succeeding districts, reaching 6, 8, 10, 12 and even higher percentages of the insurance written.

While most of the mutual companies started out strictly on the assessment plan, a few began operations on predetermined rates. Thus one of the Kansas mutual companies, which is still in existence, at first wrote insurance in any part of the state at 4 per cent. After a number of years of experience in the business this company graduated its rates according to the losses experienced, until such rates were only 2½ per cent for the south-eastern part of the state and reached 10 per cent. for some of the western counties.

The prevailing commercial rates are highest in the West Central States, reaching 15 per cent. in parts of Montana and 16 per cent. in parts of Wyoming and Colorado.

The normal rates apply to the more common cereal crops, namely, wheat, oats, maize, flax and speltz. Grasses produced for hay or seed are usually insured at the same rates as the crops just enumerated. For barley and rye the rates in most of the states are 2 per cent. higher, and the same is true for maize where protection is desired against damage to the leaves as well as to the ear. Tobacco is given a rate varying from about 1½ times the rates on wheat, oats and maize in some districts to more than 2½ times the rates on these cereals in other localities. In the South Atlantic and the East South Central States the rates for cotton are in general the same as the cereal rates, and in a few instances even 1 per cent. lower. In the West South Central States on the other hand,

the hail rates for cotton are from 2 to 4 per cent. higher than the rates for cereals.

In the extreme eastern part of the United States, as well as in the extreme western part, the rates on fruits and on garden vegetables, including peas and beans, even when raised as ordinary field crops, are in general from one half to two times the rates on cereal crops. In parts of the West South Central and Mountain States these crops may be insured at a rate 2 per cent. higher than the regular rate on cereal crops in the locality in question. The latter statement holds true for the North Central States also, except that such rates for this part of the country have usually covered garden vegetables only.

Where premium rates are determined in advance by mutual companies they are usually somewhat lower than the rates charged by joint-stock companies although a few mutual companies adhere to the commercial rates, returning a part of the premiums in dividends or rebates when the losses and expense together are low enough to permit of such action.

The author of the Bulletin had only fragmentary data at his disposal regarding the average expense ratio of the various companies writing hail insurance. Such figures as were available, however, pointed to an average expense of operation equal to about 35 per cent. of the premium. The percentage varies to some extent with the rates on the business written. Many items will be approximately the same for two policies representing the same amount of risk even though one be written in territory where the rate is 3 per cent. and the other where the rate is 12 per cent. To the extent to which the expenses of operation are proportional to the number of risks rather than the premiums, the expense ratio tends to vary inversely with the rate of premium.

The biggest single item of expense in connection with an insurance policy however, namely, the commission to the agent who solicits the business, is generally based directly on the premium collected and not on the number of risks written. This commission is now very generally fixed at 15 per cent. of the premium, but formerly as much as 20 per cent. or even more was paid. Mutual companies on the assessment plan pay their agents, as a rule, on the basis of risks written.

Some of the mutual companies working on the assessment plan limit the liability of their members and at the same time reserve to themselves the right to prorate their losses if the income from maximum assessments, together with reserve on hand, proves insufficient to meet losses and expenses incurred. Other mutual companies, operating as a rule in States where the hail hazard is less severe, make unlimited liability contracts with their members. Others, again, collect a fixed premium somewhat below the commercial rates for the territory in question, while the policy provides for a contingent liability on the part of the insured equal to the fixed premium. Under this plan the insured may in some years have part of the premium returned to him as a rebate, while in years when losses are heavy he may be called upon to pay a further sum in respect of the contingent liability he has assumed. This plan has been found desirable

more particularly for territory where the hail hazard is severe and where annual policies on which the premium is paid in advance are the rule.

Whichever plan is adopted with reference to the contribution or liability to contribution of the insured, a reasonable reserve should be provided in years when losses are relatively light against the years when relatively heavy losses will be incurred. No mutual insurance company operating on the fixed premium plan should place its rates at so low a figure that they will not amply cover average losses, plus reasonable operating expenses, plus a fair contribution to the reserve fund. In a year of very light losses a part of the surplus premiums may, of course, be returned to the insured as a rebate, but before such rebate is declared a liberal addition to the reserve should be made. The method should be followed until the company has a reserve at least equal to the average annual premium income.

A mutual insurance company operating on the assessment plan should similarly add to its reserve fund each year in which its losses are average or below the average. This may be done by a proper addition to the rate of assessment.

The mutual insurance companies are to an increasing extent recognizing the necessity of building up a reserve fund. Ten of the older and larger mutual companies now doing business had a total of surplus or reserves at the end of 1918 amounting to nearly \$920,000.

(To be continued).

Part III: Credit

ITALY.

RECENT LEGISLATION RELATING TO AGRICULTURAL CREDIT

OFFICIAL SOURCES:

- DECRETO LEGGE LUOGOTENENZIALE 8 OTTOBRE 1916, N. 1336, CONCERNENTE PROVVEDIMENTI PER AGEVOLARE IL CREDITO ALLE ASSOCIAZIONI AGRARIE.
- DECRETO LUOGOTENENZIALE 10 MAGGIO 1917, N. 788, CONCERNENTE PROVVEDIMENTI PER LA COLTIVAZIONE DEI CEREALI.
- DECRETO LUOGOTENENZIALE 26 LUGLIO 1917, N. 1269, CONTENENTE DISPOSIZIONI PER AGEVOLARE ALLE ASSOCIAZIONI AGRARIE IL CREDITO PER LA COLTIVAZIONE DEI CEREALI.
- DECRETO-LEGGE LUOGOTENENZIALE 14 LUGLIO 1918, N. 1142, CHE ABROGA E SOSTITUISCE IL DECRETO LUOGOTENENZIALE 4 OTTOBRE 1917, N. 1604, RECANTE PROVVEDIMENTI PER IL CREDITO AGLI ENTI AGRARI DEL LAZIO
- DECRETO LUOGOTENENZIALE 12 GIUGNO 1919, N. 997, PORTANTE MODIFICAZIONI ALLA LEGGE 21 DICEMBRE 1902, N. 542, CHE ISTITUI IN ROMA L'ISTITUTO "CREDITO AGRARIO PER IL LAZIO".
- DECRETO-LEGGE LUOGOTENENZIALE 22 GIUGNO 1919, N. 1190, CHE APPORTA MODIFICAZIONI ALLA LEGGE 31 MARZO 1904, N. 140, E ALLA LEGGE 9 LUGLIO 1908, N. 445, SULLA CASSA PROVINCIALE DI CREDITO AGRARIO PER LA BASILICATA.
- REGIO DECRETO 20 LUGLIO 1919, N. 1414, PORTANTE AUMENTO DEL FONDO STANZIATO PER ANTICIPAZIONI AGLI ISTITUTI DI CREDITO AGRARIO.
- REGIO DECRETO 28 DICEMBRE 1919, N. 2638, CHE APPORTA MODIFICAZIONI ALLO STATUTO DEL "CREDITO AGRARIO PER IL LAZIO."
- REGIO DECRETO-LEGGE 22 APRILE 1920, N. 516, RECANTE PROVVEDIMENTI PER IL CREDITO FONDARIO E AGRARIO A FAVORE DI ASSOCIAZIONI DI LAVORATORI DELLA TERRA.
- REGIO DECRETO-LEGGE 4 MAGGIO 1920, N. 661, CHE AUTORIZZA LA COSTITUZIONE DI UN CONSORZIO DI CASSE DI RISPARMIO E DI BANCHE POPOLARI NEL VENETO PER L'ESERCIZIO DEL CREDITO AGRARIO NELLE VENEZIE.
- REGIO DECRETO 7 GIUGNO 1920, N. 775, CHE ESTENDE E DISCIPLINA LE FUNZIONI DELLA SEZIONE DI CREDITO AGRARIO DEL BANCO DI SICILIA.
- DISEGNO DI LEGGE PER LA RIFORMA DELL'ISTITUTO DI CREDITO VITTORIO EMANUELE III PER LE CALABRIE, presented by the Minister of Agriculture (Micheli) to the Chamber of Deputies at the sitting of 1 August 1920. *Atti Parlamentari*, N. 899.
- REGIO DECRETO 19 SETTEMBRE 1920, N. 1418, CHE APPROVA IL REGOLAMENTO DEL FUNZIONAMENTO DELLA SEZIONE DI CREDITO AGRARIO DEL BANCO DI SICILIA.

LEGGE 8 OTTOBRE 1920, N. 1479, CHE APPORTA MODIFICAZIONI ALLE LEGGI PER LA SARDEGNA.
REGIO DECRETO 14 NOVEMBRE 1920, N. 1703, CHE APPROVA IL REGOLAMENTO PER IL FUNZIONAMENTO DELLA SEZIONE DI CREDITO FONDARIO ED AGRARIO DELL'ISTITUTO NAZIONALE DI CREDITO PER LA COOPERAZIONE.

DECRETO MINISTERIALE 20 GENNAIO 1921 CHE APPROVA LA CONVENZIONE COSTITUTIVA DELLA SEZIONE DI CREDITO FONDARIO ED AGRARIO DELL'ISTITUTO NAZIONALE DI CREDITO PER LA COOPERAZIONE.

REGIO DECRETO 10 MARZO 1921, N. 549, CHE APPROVA IL REGOLAMENTO PER L'ESERCIZIO DELLA VIGILANZA GOVERNATIVA SUGLI ISTITUTI DI CREDITO AGRARIO DELLA SARDEGNA.

OTHER SOURCES:

BACCAGLINI (A.): Il credito agrario nei provvedimenti di guerra *Compte Economico*, No. 52. Rome, 27 december 1917.

DORE (Dott. Francesco): La riforma del credito agrario in Sardegna. *Il Villaggio e i Campi*, No. 8. Milan-Rome, 19 February 1921.

INDRIO (P.): Lo Stato ed il credito agrario. *I Campi*, No. 28. Rome, 11 July 1920.

PASSALACQUA (Prof. V.): La sezione di credito agrario presso il Banco di Sicilia nei suoi rapporti con l'incremento dell'Agricoltura siciliana. *Il Rinnovo Economico-Agrario in Provincia di Trapani* No. 3. Trapani, Marzo 1921.

Under the impulse of the special exigencies created by the war, of which the most important is the necessity of stimulating agricultural production in Italy to the utmost, regulations were made which have resulted in a new system of agricultural credit with important innovations of principle, and these innovations, as they are more in keeping with the nature of this form of credit, may have beneficial results even when the conditions of rural economy are again perfectly normal. We shall now indicate the fundamental principles and the more important provisions of the recent Italian legislation on agricultural credit.

§ I. INNOVATIONS OF PRINCIPLE.

The reader of this *Review*, who has followed the articles on agricultural credit, will undoubtedly have observed that this credit had in Italy before the war, according to practice and legislation, an eminently personal character; chattel security, represented by produce in respect of which the lending institution had special privileges whereby advances were guaranteed, was in fact considered of secondary importance. The credit was based on the general solvency and the personal economic conditions of the debtor, rather than on the produce resulting from the agricultural operation for which the loan was obtained. Thus the loan was more than anything else a supplementary sum serving to complete the working capital possessed by the agriculturist, and credit was therefore granted especially to well-to-do cultivators, and seldom to the more needy ones. Now it is clear that this state of affairs might be permitted in normal times when the State need not concern itself with production, but under new conditions when credit should give an effective impulse to production, this attitude could no longer be maintained. Already in order to cope with the gravity of the situation

caused in southern provinces by the devastations of moles, and to prevent the agriculturists of Bari, Campobasso, Foggia and Potenza (who after two bad harvests had lost almost the whole of a third through incursions of moles) from abandoning the land and withdrawing large tracts from the cultivation of cereals, measures had been taken in 1916 to place ample credit at the disposal of all those who wished to undertake cultivation, fixing the guarantee of the loan, not in the economic capacity of the debtor at the time of borrowing, but in the value of the produce. Instead of a single fixed limit of loans for sowing and for the work of cultivation it was decided (Decree of 27 July 1916, No. 913) what sum would be required for preparing, ploughing and sowing one hectare of land, and every agriculturist whatever his economic condition might be, excepting only the great landowners, was enabled to receive loans in proportion to the number of hectares to be sown on his personal signature, without the need of having recourse to the signature of sureties or the guarantee of any intermediary body. The only guarantee of the loan was constituted by the legal privilege of the lending institution in respect of the produce, according to the degree established by the Civil Code with the addition only of precedence over every other credit for the same object. This was a considerable modification of the system hitherto pursued.

In 1917, by the Decree of 10 May, No 788, an effort was made to create the most favourable conditions possible for the intensification of the cultivation of cereals, vegetables, and edible tubers, by so guaranteeing the operations of agricultural credit that not only the special agricultural credit institutions but credit institutions of every other kind should also be induced to invest their capital in this form of loan. This decree, however, extended the basis of the privilege of agricultural loans, while preserving to the privilege so extended its character as a privilege arising from the law without the need of any written agreement between the parties. The credit for loans granted for the cultivation of cereals, vegetables, and edible tubers, is privileged by the new provision, not only in respect of the special product which was obtained with the help of the loan, but indiscriminately of all the produce of the land, including fruit still on the trees, and all the commodities produced by the land and still stored in the dwellings or farm buildings. The privilege thus extended will have the same precedence as is given by the Civil Code to the privilege in respect of the single product, so that the credit of the lending institution takes precedence even of that of the landowner in respect of all the above mentioned commodities. (With regard to some other aspects of the work of the tenants, the landowner has priority of privilege, so that his legitimate interests are protected). The effectiveness of the security is thus no longer subject to the risks of separate products, but rests upon a variety of elements whereby the lending institutions are more fully protected. On the other hand, severe legal penalties are incurred by debtors who allow commodities in respect of which there is special privilege to deteriorate, or utilize the borrowed sums, even in part, for purposes other than that for which they were obtained. Finally, since it may happen

that the loan granted for an agricultural year may (as occurs when land is left to lie fallow) be secured by the harvest of the following year and meantime the land, if let, may pass to another occupier, it is expressly provided that the privilege shall hold good as against any person occupying, managing or cultivating the land at the expiration of the loan; thus the agricultural privilege, by an important innovation in principle, receives the character of a charge on the land.

Passing on to consider the principal regulations issued in these last years, it will be seen that the legislature is increasingly anxious to give larger satisfaction to the growing needs of agriculture and to the new aspirations of the rural classes, among which the most notable is the desire of the peasantry to obtain land, a desire which, together with others different but no less important, reflects the altered spirit of the times, and which, having been met by adequate legal provisions, has given a new direction to transactions of agricultural credit.

§ 2. PROVISIONS FOR LAND AND AGRICULTURAL CREDIT IN FAVOUR OF ASSOCIATIONS OF AGRICULTURAL LABOURERS

The vast co-operative movement which has taken place in Italy during the last few years, especially in the form of associations of peasants for the collective hiring and purchase of land, has proved the necessity for the collaboration of the State in the work of financing co-operative societies, which, precisely because they are chiefly composed of humble labourers, must have large and frequent recourse to credit. It therefore seemed expedient during the war period — when special credit arrangements were made to encourage and facilitate agricultural production and especially the cultivation of food stuffs — to include the National Credit Institution for Co-operation in the number of institutions to which advances were to be granted if necessary from the State funds, and thus to put this institution in a position to grant loans to agricultural co-operative societies which were in want of means to carry on a rational system of management of land and an intensified cultivation.

When demobilization began, the number of agricultural labourers organized in co-operative societies for production and labour increased rapidly, while among the working classes an increasing aversion was manifested from dependence on the landowner or tenant farmer. New demands were put forward by the agricultural co-operative societies for purposes no longer limited to agricultural operations, but extended to agricultural and land improvements and the purchase of land by labourers.

The Government therefore considered it indispensable that the National Credit Institution for Co-operation should be placed in a position to meet these new demands, and especially that of credit for the purchase of land, which aims at securing the transfer of the ownership of land to agricultural labourers, thereby eliminating the conflicts which are injurious to agricultural production. With this object the Decree of 22 April

1920, No. 516, authorized the National Credit Institution to constitute a Land and Agricultural Credit Section which should carry on credit operations for the purposes indicated. The Decree of 14 November 1920, No. 1703, sanctioned the regulations for its working, of which we now give the general outlines.

The Section is an autonomous body with separate funds and distinct as to its management from the National Credit Institution for Co-operation. It has a foundation capital of 50,000,000 liras, of which 25,000,000 liras are assigned to it by the State as a special contribution without interest, 15,000,000 lire are granted by the *Opera Nazionale per i Combattenti* (1), and 10,000,000 lire by the *Cassa Nazionale per le Assicurazioni Sociali*.

The State has also granted another 50,000,000 lire as an advance for the working credit, and it will contribute at the rate of 2 $\frac{1}{2}$ per cent towards the payment of the interest on the mortgage loans of which we shall shortly speak.

The Section is administered by a committee of nine members, including the President, the Vice-president, the Councillor delegated by the National Credit Institution for Co-operation, six members nominated by the *Opera Nazionale per i Combattenti*, and three elected by other associated institutions. The Director-general of the Institute is also Director-general of the Section. A government commissioner sees that the law and the regulations are strictly observed, and a committee of auditors supervises the work and audits the annual balance sheet of the Section.

The work of the Section is to furnish credit to agricultural societies and associations of agricultural labourers legally constituted, whether they hold land as owners, as tenants, by emphyteusis, by metayage or other produce-sharing tenancy or occupy the land, temporarily or permanently, by voluntary agreement or by arrangement with the administrative authorities in accordance with the Royal Decree of 2 September 1919, No. 1633, and that of 22 April 1920, No. 515 (occupation of waste or badly cultivated lands).

The transactions are divided into *ordinary loans* and *mortgage loans*.

Ordinary loans. — Ordinary loans are either for *working expenses* or for *agricultural improvements and transformations*.

Loans for *working expenses* are for the management and the ordinary cultivation of land and the manipulation and preservation of produce and they may be granted : —

(1) for the payment in advance of rents and dues, and for the deposits required when taking possession of land on collective lease ;

(2) for cultivation, seeds, fertilizers, spraying materials, insecticides etc. ;

(3) for the hire of machines and implements, and for the cost of insurance ;

(4) to equip the holdings with live or dead stock, with machines and

(1) For the formation and objects of the *Opera Nazionale per i Combattenti* see the article published in our issue of June-July 1919.

implements and with appliances for handling and preserving agricultural produce ;

(5) as loans on the pledge of agricultural produce, either retained on the farm or stored in general warehouses or other public or private depositories.

The loans of the first three kinds are for one year unless they are for biennial cultivation, in which case the maximum duration is for two years ; those of the fourth class are for a maximum duration of five years, and they must not be repaid by instalments. The advances on the pledge of agricultural produce must be for more than four months, but may be renewed, when the nature of the produce allows of longer deposit without danger of deterioration ; and loans for the payment of deposits on taking possession of land must be made according to rules which reconcile the exigencies of credit with those of the agricultural industry.

Loans for *agricultural improvements and transformations* are intended for the planting of trees (olive trees, almond trees, fruit trees, vines, etc.) the transformation from one form of cultivation to another, and to a limited extent the improvement of lands and buildings.

The sums granted as loans for such purposes must be paid according as the works for which they are intended make progress and they must be repaid within the maximum limit of ten years, by instalments beginning from the year following that in which the improvements or transformations begin to be productive. These sums are guaranteed by special privilege according to the Decrees of 8 October 1916, No. 1336, and 26 July 1917, No. 1269 (privilege in respect of fruit on the trees).

Mortgage Loans. — Mortgage loans are granted for the following purposes :

- (1) purchase of land ;
- (2) redemption of rent charges and dues and transformation of land debts ;
- (3) erection of rural buildings as habitations for the cultivators, or sheds for cattle and for the preservation of dead stock and agricultural produce as well as for the manipulation of produce ;
- (4) construction of farm roads ;
- (5) construction of works for storing up water for drinking and for irrigation, for systematizing, drying and consolidating lands ;
- (6) construction of wells and drinking troughs, enclosing walls, hedges, and any other mode of fencing or enclosing land ;
- (7) improvements contemplated by special laws, supply of electricity for agricultural purposes, irrigation, cultivation of mountain districts, reafforesting, and any other work tending to the improvement of holdings.

Loans must always be guaranteed by a first mortgage, and should not be granted for sums above 80 per cent. of the purchase price or estimated value of the land. They are made in cash, and are to be repaid by a system of gradual amortization in a period of time not less than 5 years and not more than 30 years.

Mortgage loans may also be granted to bodies or associations in occupation of land provided that the landowner gives a valid mortgage guarantee, for a period not exceeding the duration of the existing lease, unless the owner recognizes explicitly and gives compensation for unexhausted improvements.

The interest on mortgage loans must not exceed 6 per cent. The State, as already mentioned, contributes to the extent of $2\frac{1}{2}$ per cent. towards the payment of the interest on these loans.

In case of delay in paying a half-yearly instalment, the Section may resort to the legal process of expropriating the land, and may ask for the nomination of a sequestrator who shall undertake the collection of interest and of every eventual credit.

When the Section has invested in loans at least half its capital, it may issue bonds amounting to ten times the capital guaranteed by the whole of the mortgages registered according to rules similar to those in force for the bonds of land credit institutions.

The Section has already begun work. It is, substantially, a kind of bank for peasants' associations and is authorized to grant three kinds of credit for land purchase, for land improvement and for working expenses. Considering the sum fixed, it is a first and modest experiment, not without importance at the present time, when any initiative is specially appreciated which tends to the better solution of the land question, in the general interest of production

§ 3 RE-ORGANIZATION AND EXTENSION OF THE FUNCTIONS OF THE AGRICULTURAL CREDIT SECTION OF THE BANK OF SICILY.

By the Decree of 7 June 1920, No. 775, followed by the regulations of 19 September of the same year (No. 1418) the Agricultural Credit Section of the Bank of Sicily was re-organized on a new basis, and endowed with additional powers in order that it might be fitted to perform a greater task and to respond better to the present exigencies of the agricultural economy of the island.

The aim of the new provisions is to facilitate the transfer of the land into the hands of those who directly cultivate it, to free it from the charges which burden it, to afford the greatest assistance to collective letting, and to every form of co-operation, both in the purchase and the use of agricultural requisites, and in the handling and sale of agricultural produce. It is desired to support every initiative tending to improve the land and its agricultural management and to increase the amount and value of production.

The Section is therefore authorized to grant loans to agriculturists, either individually or in associations, or open current mortgage accounts for the purchase of land, for the redemption of rent charges and dues, for improvement and transformation of agriculture and landed property. Special mention must be made of those operations, also authorized by the same decree, intended to put public bodies, agricultural co-operative soc-

ieties, and other agricultural credit institutions in Sicily, in a position to buy rural property with a view to improving it and dividing it into lots to be granted to those who will directly cultivate it.

The maximum duration of current accounts is fixed at five years and that of loans at thirty years. The State contributes at a rate not exceeding $2\frac{1}{2}$ per cent. towards the payment of interest on loans, which can thus be made on easy terms. In this State contribution there is a distinct recognition of the character and the social aims of land credit as regulated by the recent provisions.

As regards credit for working expenses, besides the objects already indicated for which the Section could grant loans according to the Laws of 29 March 1906 (No. 100), 15 July 1906 (No. 383) and 2 February 1911 (No. 70) and the corresponding regulations, it was also entrusted with the task of granting loans (a) to put intermediary bodies accredited to the Bank in a position to advance the caution-money payable on taking a collective lease; (b) for the hire of implements and agricultural machines, and for the cost of insurance; (c) for the handling and transformation of produce, in order to insure just satisfaction to every requirement of agricultural industry. For this purpose, every limit as to amount having been removed, power was given to the Section to proportion the loans to the real requirements, a rational innovation likely to lead to the most beneficial results.

Advances for the purchase of land, for the redemption of rent-charges and dues, and for land improvement and transformation, must not exceed four fifths of the purchase price or the value of the land, and must always be guaranteed by a first mortgage. Advances for agricultural improvement, and all those with the general object of rendering the land more productive, transforming the produce of the soil and facilitating its transport and its sale in the great markets, making possible and developing the breeding and sale of live stock, and in general all analogous forms of agricultural activity, may be guaranteed only by privilege based on agreement (1) when not exceeding 10,000 lire. Advances of larger sums must be guaranteed by such mortgage as may be judged sufficient by the Central Credit Commission. This is formed of the Director of the Section, who acts as president, and four other members, of whom one is nominated by the Minister of Agriculture, two by the Council of Administration of the Bank of Sicily, from among the managers of agricultural co-operative societies in Sicily, and one by the Council of Administration of the Victor Emmanuel Central Savings Bank of Palermo. All the members of the Commission must be chosen as being experts on the subject of agricultural credit. It is entrusted with the delicate task of determining the lines upon which agricultural credit shall be distributed, of giving

(1) This form of privilege, established by the Law of 23 January 1887 (No. 4276), was successively modified by the Decrees of 8 October 1916 (No. 1336), and 26 July 1917 (No. 1269) on lines which considerably increased its efficacy as regards agricultural associations and co-operative societies.

an opinion on questions of general principle, and on the interpretation of the laws and regulations relating to the subject, and of considering the granting of the loans, advances and current accounts above described.

For the sake of brevity we omit to mention other modifications in the regulations of the Section, almost all of which were rendered necessary by its new functions. We need only point out how, in order to make it workable, its financial resources were proportionately increased. The Section, indeed, had not capital of its own, and it confined itself to carrying on credit transactions by means of the capital of the provincial agricultural credit banks in the island. By the Decree 7 June 1920, No. 775, its capital was formed by the capital of the provincial banks and the respective increases, completed by a sum of 10 million liras granted by the State without interest.

Large sums have also been placed at the disposal of the Section, and it has been authorized to issue land bonds to procure the means necessary for granting loans guaranteed by first mortgage.

It is believed that the work of the Section under the provisions described will respond not only to the requirements of the country in respect of agricultural credit, credit for working expenses and for improvements but also to the peculiar exigencies of the present time, when the possibility of purchase, division, and direct management of land by associations of agricultural labourers is undoubtedly an efficacious method of social pacification.

§ 4. AGRICULTURAL CREDIT IN BASILICATA.

Agricultural credit in Basilicata is entrusted to a Provincial Bank, with head-quarters at Potenza, established by the Law of 31 March 1904 (No. 140) by which also the working of the local agricultural credit banks is regulated. The object of this is not only to supply capital to agriculturists for agricultural purposes, but also to advance money for the improvement of land. The experience of more than ten years has shown the necessity of some reforms in the provisions relating to the Provincial Bank and such reforms were sanctioned by the Decree of 22 June 1919, No. 1190.

Art. 1 of the Law of 31 March 1904, as amended by the Law of 9 July 1908 (No. 445) indicated the following objects for the work of the bank: (a) to make advances in money, implements or machinery to the *Monti frumentari*, agricultural banks, and agricultural consortia, in the cases and in the manner prescribed by the law and the regulations; (b) to make advances to those holding land by emphyteusis, and to recognised agricultural co-operative societies which have started agricultural or kindred industries, provided that the advances shall serve exclusively for the construction of farm-houses, well-planned stables, farm roads, works for supplying water for drinking and irrigation, for the fencing of unenclosed ground with walls or hedges, for planting useful trees or for re-afforesting, for the purchase of live stock, farming implements, raw materials and

equipment in general; (c) to make advances to owners and occupiers of lands for agricultural improvements.

The above quoted decree also authorizes making loans for the redemptions of rent charges and dues and for the purchase of land to be divided into small holdings for cultivation, as well as for carrying on all banking business for the convenience of the agricultural clients of the bank which are in conformity with its nature and its objects. As a guarantee of the loans granted for working expenses, for which the establishment of special privileges within the meaning of the Law of 23 January 1887, No. 4276, was requested, the bank is allowed the special privileges in favour of agricultural credit authorized during the war. Thus such loans are guaranteed by legal privilege, with precedence over every other claim except that for law expenses, on the produce of the land and the live or dead stock according to art. 9 of the Decree, already mentioned, of 10 May 1917, No. 788, and art. 6 of the Decree of 17 June 1915, No. 961, without obligation to fulfil the formalities required for the constitution of the special privilege and without the necessity of seeking for sureties, which would make agricultural credit inaccessible, or almost inaccessible, to the small agriculturist.

Simpler and at the same time more complete regulations have been drawn up for the administrative working of the Bank. Experience having proved that the Bank would have difficulty in working by means of the local bodies contemplated by the laws, which, owing to insufficient means and want of a definite object, dragged out a miserable existence, giving little proof of activity, it was authorized to establish agencies and branches wherever it seemed necessary, and an arrangement was made by which the *Monti frumentari* and agricultural banks which could not do useful work should be compulsorily amalgamated with the *Monti frumentari* or agricultural banks of adjoining communes, or else be absorbed by the Provincial Bank, all being subjected to the supervision of the Ministry of Agriculture. Lastly, to assure to itself means proportionate to the work to be done, the Bank was authorized not only to receive savings deposits but also to postpone repayment of the advances made to it by the State, whether for the purpose of making subsidies to farmers whose land had been damaged by moles, or subsidies for the encouragement of cereal-growing in the agricultural years 1917-18 and 1918-19. These advances amounted to 5,450,000 liras, and together with the 2,000,000 liras capital assigned to the Bank by the Law of 1904 and other contributions and surpluses may be employed in loans for improvements, while the sums required for making loans for working expenses will be drawn from the deposits received.

§ 5. AGRICULTURAL CREDIT IN SARDINIA.

Among the special provisions enacted in favour of Sardinia, those connected with agricultural credit are of special importance. By these, two provincial agricultural credit banks were established called *Casse*

ademprivili because to them were assigned all the former *ademprivile* property, free from all servitudes, burdens, or divided ownership. Of such property the woodland or land to be re-afforested should have been entrusted to the Forest Administration, and that which was adapted to cultivation should have been divided up and granted in emphyteusis. It at once became evident that the banks were ill-adapted to the management of such property, while their establishment was truly providential for everything connected with agricultural credit. Recent provisions in the Law of 8 October 1920, No. 1479, have, however, introduced radical innovations into the system then in force, with a view to making of the banks two powerful institutions endowed with ample powers and adequate means. They assumed the appellation of Provincial Banks of Agricultural Credit, and they are authorized to carry on all credit business connected with agriculture, agricultural and land improvements, and the purchase of land to form small holdings for cultivation, as well as to carry out banking transactions in the interest of their own agricultural clients, if recognized as helping to promote the objects of the banks themselves. These provisions are analogous to those which, as we have seen, have been made for the Basilicata, and they fully meet the most urgent necessities of the agricultural economy of Sardinia.

Provision has been made for increasing the funds at the disposal of the banks by deferring the repayment of advances granted to them by the State, by lending to the banks themselves the sum of 8,000,000 liras set apart for granting loans for agricultural improvements according to the Law of 16 July 1914, No. 665, or by granting power to alienate the former *ademprivile* property assigned to them, and lastly by authorizing them to receive savings deposits or deposits on current account.

The composition of the Council of Administration of each bank has also been modified, so that it is now composed exclusively of persons who are experts in matters of agricultural credit, and a permanent Discount Committee has been formed in order to ensure the best and most rapid methods of transacting business.

Arrangements have also been made for the better control of the *Monti frumentari* and agricultural banks which are to act as sections of the provincial banks. To these last are granted new and important facilities and fiscal exemptions to enable them to distribute credit on favourable terms, in order to contribute efficaciously to the progress of agriculture in Sardinia.

§ 6. AGRICULTURAL CREDIT IN LATIUM.

The Law of 21 December 1902, No. 542, which instituted in Rome the *Credito agrario per il Lazio* only authorized that institution to grant loans to agriculturists for working expenses. The desirability of its being in a position to employ the ample funds at its disposal, accruing from the influx of deposits, in loans for agricultural improvements, thus contributing to intensification of agriculture in the province of Rome was un-

doubted, and accordingly the Decree of 12 June 1919, No. 997, granted the requisite powers.

By the Decree of 28 December 1919, No. 2,638, which introduced new modifications into the by-laws of the *Credito Agrario per il Lazio* loans for agricultural improvements and transformations may be granted to consortia and institutions legally constituted which have their offices and their work in the province of Rome, as well as to individual farmers of the same province.

The Decree of 14 July 1918, No. 1,142, providing for credit to the agricultural corporations of Latium is also of special importance (1). It contains provisions for enabling these corporations to obtain credit for cultivation expenses more easily and to larger amounts. It authorizes the National Credit Institution for Co-operation to give them credit, thus providing them with the necessary funds for the ordinary cultivation and management of the land. It also contains provisions enabling them to redeem the charges upon the communal property and to increase and improve it. The National Insurance Institute, the National Fund for the Insurance of Workmen against Invalidity and Old Age, now the National Fund for Social Insurance, the savings banks, the *Monti di Pietà*, the ordinary credit institutions and the co-operative credit institutions, independently of the provisions of any laws, regulations or by-laws, are empowered to grant loans when necessary.

The principle of the guarantee offered by the State to lending institutions for the payment of the annual instalments of the loans granted to these societies is noteworthy.

This decree supplies a keenly felt want in Latium, and fulfils the desires of its agricultural population by opening a new and easy way of endowing the agricultural corporations of this region with larger tracts of land, and of improving the land already in their possession

§ 7. AGRICULTURAL CREDIT IN VENETIA.

For agricultural credit in Venetia the Decree of 4 May 1920, No. 661, authorized the constitution of a Consortium of Savings Banks and of Popular Banks, to grant to the Venetian agriculturists loans for the management and the ordinary cultivation of their land, for harvesting, for utilizing and manipulating produce, etc. The interest on the loans is to be 1 per cent lower than the official rate of discount.

The Consortium, of which the headquarters are in Venice, at the

(1) The agricultural corporations here referred to are the so-called *Università agrarie*. The term includes all the associations formed in some communes of Latium and other provinces of the former Papal States for the exercise and the protection of the common rights (*us civis*) of sowing, pasture, wood-cutting, etc., in the interests of the rural communities, or for the cultivation of the communal lands, whether they are regulated by the Law of 4 August 1894, No. 397, or by the law relating to communes and provinces, or by the provisions regarding corporate bodies. In Latium there are at present 126 such associations.

Istituto federale di Credito per il risorgimento delle Venetie (2) began its works in January of the current year. According to its constitution, which has recently been approved, it may include not only savings banks and popular banks, but also co-operative credit institutions acting as popular banks, including federations of rural banks legally constituted, working in the provinces of Belluno, Padua, Rovigo, Udine, Treviso, Venice, Verona, and Vicenza, as also those institutions which though not co-operative in form exercise the functions of popular banks, and grant agricultural credit. These incorporated institutions seek to bring a current of credit to converge upon agriculture, sufficient to revive latent energies, encourage profitable enterprises and hasten the agricultural restoration of the region. A vast field of action is thus opening before the Consortium; the progressive improvement of the technical methods of cultivation, the systematization of vast tracts reclaimed from the marshes, the development of agricultural industries, the strengthening of collective enterprise in the farming of land, in the preservation and sale of produce, the increase of the commercial activity of agricultural consortia and syndicates, the improvement of stock-breeding, etc.

The methods of granting agricultural credit do not differ from those generally in use for ordinary credit transactions. Agriculturists, in applying for loans, should address themselves to the local institutions which belong to the Consortium; the precise agricultural purpose for which the sums applied for are required must be stated, and all statements will be investigated. The loans will be granted on the security of an agricultural bill exempt from stamp duty. Each institution belonging to the Consortium may adopt whatever form of guarantee it deems desirable in any particular case.

This, in outline, is the plan of the system of agricultural credit adopted for the Consortium, which, furnished with a liberal supply of capital, and supported by the confidence of the Venetian agriculturists, will be able rapidly to increase in strength.

§ 8. THE PROPOSED REFORM

OF THE VICTOR EMMANUEL III CREDIT INSTITUTION FOR CALABRIA.

At the session of 7 August 1920 a bill (No. 899) was presented to the Chamber of Deputies by the Minister of Agriculture (Micheli) for the reform of the Victor Emmanuel III Credit Institution. This institution, established by the Law of 25 June 1906, No. 255, was subdivided into three branches, Catanzaro, Cosenza and Reggio. Each of these branches

(2) This Institution, constituted by the Decree of 24 March 1919, No. 497, was formed for the purpose of contributing to a more rapid restoration of the districts damaged by the war, either by granting advances on the compensation for damage in process of verification or settlement by the State, or by advances and subsidies to societies, firms or private individuals engaged in works of reconstruction or restoration of land, even according to the forms established by the laws on agricultural credit

will have to assume the name of Agricultural Credit Institution, and will be able to carry on the greater part of the business which, by the Decree 22 June 1919, No. 1190, the Provincial Bank of Agricultural Credit for the Basilicata was, as we have seen, authorized to carry on. Considering, however, that the means now at the disposal of these institutions will not allow of an continuous and profitable effort for the agricultural progress of the regions of Calabria, it is proposed that the Treasury should grant to each of them an advance of 10,000,000 liras. The period for repayment is fixed at 50 years, and the rate of interest due to the State at 3 per cent.

These institutions will thus be placed in a position to contribute with efficiency to the development of the agricultural economy of Calabria, especially by employing their own capital in mortgage loans for improvements, which the Victor Emmanuel III Institute has hitherto been unable to do for want of funds, although the need was acutely felt.

*
* *

In conclusion, the new legislation in Italy on agricultural credit has ensured a more intense and efficient action on the part of the agricultural credit institutions, modifying the system where necessary, strengthening the security for loans by a timely reform of the system of privileges, and increasing the funds at their disposal, all according to the special requirements of the various regions. It not only furnishes to agriculturists, individually or combined in associations, the sums required for the ordinary cultivation of the fields, but also gives an impulse to cultivation, intensifies works of improvement and of agricultural transformation, facilitates the purchase of land by those who directly cultivate it as well as colonization and the formation of small holdings. The working of agricultural credit institutions having thus been made more efficacious, their funds increased, and their business extended to new branches, it may be said with truth that the assistance given to Italian agriculture has continued to respond to its growing and manifold exigencies, with beneficial effects on agricultural production and consequently on the national economy.

Part IV : Miscellaneous Questions relating to Agricultural Economy

I. — ECONOMIC AND SOCIAL CONDITIONS OF THE AGRICULTURAL CLASSES

GREAT BRITAIN AND IRELAND.

EARNINGS AND WORKING HOURS OF FARM-WORKERS IN SCOTLAND.

SOURCE (OFFICIAL):

WILSON (Sir James), K. C. S. I. : Report to the Board of Agriculture for Scotland on Farm-workers in Scotland in 1919-20. Edinburgh, 1921.

In view of the great changes which have taken place during and since the War in the wages and conditions of labour on farms in Scotland, the Board of Agriculture deemed it desirable to obtain up-to-date information and entrusted to Sir James Wilson the task of preparing a report on the subject. The Report, which was published early this year, deals in the main with the earnings and working-hours of farm-workers, though other matters relating to the conditions of labour are touched upon.

The most satisfactory basis for such an inquiry would have been to obtain returns from a large proportion of the farmers of Scotland, as was done in 1907; but it was realised that this would have involved much expense, delay, and trouble, and it was finally decided to issue only a comparatively small number of schedules to selected farmers in different parts of each county. The number of returns received covers about 4 per cent. of the number of holdings above fifty acres, and also about 4 per cent. of the total number of persons returned as wage-earning farm-workers in the census of 1911.

Schedules were received from 1,096 farms. The number of wage-earning farm-workers on these farms was as follows :

TABLE I. — *Number of Farm-Workers on Farms from which Schedules were Received.*

Class of worker (excluding stewards, grieves, and foremen).	Under 21.	Between 21 and 60.	Over 60.	Total.
Ploughmen	332	1,921	52	2,305
Cattlemen.	39	471	65	575
Shepherds.	17	332	46	395
Orramen	60	296	68	424
Total male workers. . . .	448	3,020	231	3,699
Female workers.	150	513	9	672
Total, both sexes.	598	3,533	240	4,371

According to the Censuses of 1901 and 1911 the number of farm-workers in Scotland was as shown in the following table :

TABLE II. — *Number of Farm-Workers in Scotland according to the Censuses of 1901 and 1911.*

Occupations.	1901.			1911.		
	Males.	Females.	Total.	Males.	Females.	Total.
Farm-grieves or foremen	4,650	5	4,655	7,250	29	7,279
Shepherds	9,647	9	9,656	9,041	11	9,052
Agricultural labourers or farm servants :						
In charge of horses	34,352	4	34,356	35,475	85	35,560
In charge of cattle	11,617	4,956	16,573	13,806	6,127	19,933
Not otherwise distinguished . . .	27,825	14,836	42,661	22,260	8,785	31,045
Total . . .	88,091	19,810	107,901	87,832	15,037	102,869

During the war a large proportion of the male farm-workers served in the Army or Navy and their places were to some extent taken by women. After the war there was a quick return to normal conditions and the supply of labour is now approximately equal to the demand.

Sir James Wilson points out that his Report is based upon figures relating to so small a proportion of the total number of farm-workers that his

calculations cannot be expected to be absolutely accurate, but they corroborate each other and have stood the test of local criticism and may therefore claim to give approximately true results.

Of the male workers on the farms included in the inquiry 12 per cent. were under 21 and 6 per cent. over 60. Few youths under 21 were employed as cattlemen or shepherds but they formed 14 per cent. of the ploughmen and orramen (odd men), these last including all male workers who are not in special charge of animals. Few men over 60 were employed as ploughmen, but they formed about 12 per cent. of the cattlemen, shepherds, and orramen. Very few women over 60 were employed, but 22 per cent. of the total were under 21.

I. — EARNINGS.

In giving a summary of those parts of the Report which relate to earning we will omit the parts relating to the minimum wages fixed in Scotland under the Corn Production Act, 1917, as we propose to deal fully with this question on a future occasion. Intimate though the connection may seem between earnings and minimum wages, they can well be studied separately. In fact, Sir James Wilson states that until recently in most districts the minimum rates of wages fixed by the Wages Committees have been well below the average wages actually paid to the different classes of workers, so that the decisions of the Committees have had little direct effect on the actual wages paid to the great majority of farm-workers, except in Caithness and one or two other areas, where the minimum rates were adopted as the basis of the wages to be paid.

Throughout Scotland a clear distinction is drawn between the married and single men. The married man is provided with a house, and generally with large allowances, while the unmarried man usually sleeps with his relatives, or is provided with bare sleeping accommodation and food in the farm-kitchen, or, if he sleeps in a bothy (a 1 or 2 roomed cottage), with considerably smaller allowances. On the farms for which returns have been received the number employed of each class, between the ages of 21 and 60 (excluding stewards, grieves and foremen), was as follows :

TABLE III. — *Number of Men between 21 and 60.*

Class.	Married.	Single.	Total.
Ploughmen	1,371	550	1,921
Cattlemen	360	111	471
Shepherds	277	55	332
Orramen	194	102	296
Total . . .	2,202	818	3,020

Of the men between 21 and 60 permanently employed on these farms 73 per cent. were married men, the proportions married in the different

classes being:— ploughmen, 71 per cent. ; cattlemen, 76 ; shepherds, 83 ; and orramen, 66 per cent.

§ I. MARRIED PLOUGHMEN BETWEEN 21 AND 60.

For Scotland as a whole the most important class of farm-workers is that of the married ploughmen, the great majority of whom are engaged for the year, though in some counties they are engaged for the half-year from Whitsunday or Martinmas. As an almost universal rule the married ploughman is provided with a cottage on the farm, free of rent and rates, in part payment of his wages and also certain allowances.

Cash Wages. — The cash wage paid to married ploughmen naturally varies according to the quantity and value of the allowances he is to receive. North of the Tay and Clyde the cash wage is still fixed at so many pounds per year or half-year, and drawn by the ploughman as he requires it. But monthly, fortnightly and weekly payments are becoming much more common.

The average cash wage for the whole of Scotland of the married ploughmen according to the returns rendered was 39s. 8d. per week. In the following table is shown the average cash wages per week of married ploughmen in the counties of Scotland in the winter half-year 1919-20.

TABLE IV. — *Average Cash Wages per Week of Married Ploughmen between 21 and 60 in the Winter Half-year 1919-20.*

County	Average cash wages per week	County	Average cash wages per week
	s d		s d
Clackmannan	51 9	Berwick	39 5
Renfrew	51 0	Roxburgh	38 3
Dumbarton	50 8	Bute and Arran	38 1
Ayr	47 0	Kincardine	34 5
Lanark	46 11	Nairn	34 3
Stirling	46 9	Ross and Cromarty	32 11
Fife	45 9	Argyll	31 9
Inverclyde	45 3	Moray	30 11
Kinross	44 3	Wigtown	30 10
Midlothian	43 8	Aberdeen	30 5
Forfar	43 3	Banff	29 6
Peebles	42 11	Inverness	29 2
Haddington	41 9	Shetland	27 0
Perth	41 9	Sutherland	23 1
Dumfries	40 9	Caithness	18 10
Seikirk	40 2	Orkney	18 9
Kirkcudbright	39 11	All Scotland	39 8

Allowances.—The allowances vary greatly in different parts of the country and even between men on the same farm. And although there is a customary scale of allowances in most counties, the ploughman makes his own bargain, according to the circumstances of his family or his own wishes in the matter.

Oatmeal is one of the most important articles allowed and commonly forms part of the married ploughmen's earnings in all counties except in the south-east of Scotland. The quantity allowed varies from 10 stones per annum in Linlithgow and Stirling to 100 stones in part of Wigtown. In the North-east counties of Scotland a common rate is 65 stones of oatmeal per annum, reckoned as $6\frac{1}{2}$ bolls of 10 stones each. On the other hand in the counties in the neighbourhood of Glasgow 20 stones per annum, or 10 stones in the half-year is the common rate. Sometimes it is stipulated that the ploughman may have half his allowance in flour instead of oatmeal.

Milk is the most valuable allowance. North of the Clyde and Forth a free supply of fresh milk is usually stipulated. In East Fife, Kinross, Argyll, Perth, Forfar and Kincardine the daily quantity is generally half an imperial gallon (16 gills or 4 pints). If milk is scarce in the winter this quantity is reduced to 12 gills or 3 pints.

Farther north the more common rate is the Scotch pint (12 gills or 3 imperial pints). South of the Clyde and Forth the custom has died out. In some counties, notably Roxburgh, Berwick and the Highland counties, it is not uncommon for the married ploughman to be allowed the keep of a cow. The cow is sometimes owned by the ploughman, who gets its milk and its calf, and sometimes by the farmer, in which case the ploughman only gets the milk. The farmer in each case provides a certain amount of food for the animal.

Another usual allowance is potatoes. Sometimes they are supplied as they are lifted from the fields; in other cases they are dressed or "ware" potatoes. In Wigtown, Argyll, Perth, Forfar, Kincardine, Aberdeen, Moray, Nairn and Inverness the allowance is 1 ton per annum. In Kinross and Ross-shire a common allowance is 30 cwt. and in East Fife 3 tons per annum. In the Lothians 16 cwt. of dressed potatoes and in the neighbourhood of Glasgow 8 cwt. per year are allowed. In Selkirk, Roxburgh and Berwick the allowance is usually made in the form of the produce of so many yards of drill. Common rates are 1,200 yards (about $\frac{1}{8}$ acre) in Selkirk, and 1,600 yards ($\frac{1}{4}$ acre) in Roxburgh and Berwick. In Sutherland, Caithness, Orkney and Shetland the usual rate is 60 chains (1,320 yards). In the Highlands and in Wigtown it is the produce of 1,000 yards.

Throughout the south of Scotland it is not usual to provide a free allowance of coal, except in Wigtown, where 5 tons or less is frequently part of the bargain; but in the counties north of Perth and Forfar 1 to 4 tons is allowed. In Nairn, Inverness and Ross 1 or 2 loads of firewood in the year are often provided free.

It is sometimes part of the bargain that the ploughman shall be allowed to keep a pig or poultry, and usually he can take any straw he may require

or enough manure for his garden. In the extreme north he is sometimes given a fat sheep or a side of bacon.

Generally speaking, the cash wage agreed upon is understood to cover all cash payments for the year or half year, except in the case of recognised overtime. But in Wigtown, Selkirk, Roxburgh, Berwick, Edinburgh, Linlithgow, Clackmannan, and Stirling and some other counties in the South of Scotland an additional harvest fee of £1, £1 10s., or £2 is generally paid.

It is the universal custom for the farmer to provide free cartage for the married ploughman's coal, firewood and flitting, and as the married ploughman changes his place of employment about once in three years, this privilege is of considerable value.

Valuation of Allowances. — Under Sec. 12 (1) (b) of the Corn Production Act, 1917 and the Regulations made thereunder, District Committees are required to define the value at which benefits or advantages are to be reckoned as payment of wages in lieu of payment in cash for the purposes of the minimum wage. The Central Committee has laid down the general principles, (1) that the house and garden are to be reckoned at the value placed upon them in the last valuation roll of the county, and (2) that in the case of potatoes the price is taken to be that current at the time when the main crop is lifted. The valuations of the principal articles are presented in Table V (page 294).

Weekly Value of Allowances. — The average total weekly value of allowances was 10s. 7d., that is the allowances accounted for 21 per cent. of the total earnings. But this proportion varied very greatly in different counties. For instance, in Midlothian where the total earnings were 47s. 4d., the value of the allowances was only 3s. 8d. (8 per cent.), while in Aberdeen, where the total earnings were 47s. 11d., the allowances were valued at no less than 17s. 6d. (37 per cent.). Throughout the area south of the Clyde and Forth (with the exception of Wigtown, 15s. 5d.), the average value of the allowance was less than 10s. a week, while north of the Clyde and Forth it was (except in Shetland) over 12s. a week.

Table VI (page 295) shows the average value of allowances per week of married ploughmen between 21 and 60 in each county of Scotland in the winter half-year 1919-20.

Earnings. — In comparing the average total weekly earnings of married ploughmen in the different counties, it is desirable to distinguish between those counties in which the cash wage was mainly fixed at Whitsunday 1919 and those counties in which the cash wages payable in the winter of 1919-20 were mainly fixed at Martinmas 1919.

In the latter cases, the average earnings were usually higher than in the former cases, because, when the Whitsunday engagements were made, the cost of living was falling, while it was higher and rising before Martinmas.

TABLE V. — *Values placed by Wages District Committees on Allowances, used in reckoning the Values of Allowances in Winter 1919-20.*

Wages district	Oatsmeal per stone	Potatoes		Fresh milk per gallon	Keep of cow without artificial feeding-stuffs		Coal per ton	Cartages per annum	Board and lodging for adults—per week		Bothy accommo- dation per annum
		Per ton dressed	In the drill		On low land	On hill land			men	women	
	s. d.	£ s.		s. d.	£ s.	£ s.	Shillings	£ s.	s. d.	s. d.	£ s.
Dumfries and Galloway	4 2	6 5	—	2 3	15 0	8 0	35	1 0	16 0	14 0	—
Border Counties, . . .	4 9	9 0	26 13s per 800 yds.	2 6	23 8	10 8	Cost price	2 0	20 0	13 0	—
Lothians and Peebles .	4 4	6 0	24 10s. per 800 yds.	2 0	15 0	10 0	30	1 0	20 0	20 0	9 2
Pife and Kinross . .	4 2	4 10 (undressed)	—	1 10	—	—	—	1 0	—	—	10 0
Clyde and Forth . . .	4 4	6 0	—	2 3	14 0	5 0	30	1 0	18 6	15 6	—
Ayr	Who. price	Who. price	—	Who. price	—	—	Price paid by farmer	Nil.	16 0	14 0	—
South-West Highlands .	4 4	6 0	—	2 0	15 0	6 0	40	1 0	16 0	13 0	—
Forfar and Perth . .	4 4	6 0	—	2 3	21 0	12 0	36	4 0	21 0	17 6	10 0
North-East Counties . .	4 7	10 0	—	2 0	17 0	5 0	Price to employer	1 0	14 0	11 0	—
Money Firth	Flax price	6 0	—	1 9	15 0	6 0	Who price	Nil.	14 0	14 0	—
North-West Highlands .	4 4	6 0	—	2 3	12 0	7 10	Who. price	—	17 0	13 6	—
Northern Counties											
Sutherland	4 5	6 0	24 per 60 ch.	1 6	15 0	7 0	44	—	17 6	10 0	—
Calthness	4 0	6 0	24 per 60 ch.	1 6	15 0	7 0	41	—	15 0	10 0	—
Orkney	4 4	6 0	24 per 60 ch.	1 6	15 0	—	67	—	17 6	10 0	—
Shetland	4 2	6 0	24 per 60 ch.	1 6	10 0	5 0	74	—	15 0	10 0	—

TABLE VI. — *Average Value of Allowances per Week of Married Ploughmen between 21 and 60 in the Winter Half-year 1919-20.*

County	Average value of allowances per week		County	Average value of allowances per week	
	s.	d.		s.	d.
Sutherland	20	10	Roxburgh	8	10
Perth	18	7	Selkirk	7	8
Kincardine	18	2	Lanark	7	8
Aberdeen	17	6	Shetland	7	8
Caithness	17	6	Peebles	7	1
Orkney	17	3	Dumfries	6	8
Nairn	17	1	Kirkcudbright	6	7
Argyll	16	5	Clackmannan	6	4
Forfar	16	2	Ayr	5	11
Inverness	16	2	Stirling	5	8
Moray	16	1	Dumbarton	5	2
Bute and Arran	15	9	Renfrew	5	1
Wigtown	15	5	Linlithgow	4	4
Ross and Cromarty	13	9	Haddington	4	2
Fife	13	0	Midlothian	3	8
Kinross	12	11			
Berwick	9	2	All Scotland	10	7

Tables VII and VIII show the average total weekly earnings of married ploughmen in the two groups of counties :

TABLE VII. — *Average Total Weekly Earnings of Married Ploughmen between 21 and 60 in the Winter Half-year 1919-20 in Counties in which the Cash Wage was mainly fixed at Whitsunday 1919.*

County	Average total earnings per week		County	Average total earnings per week	
	s.	d.		s.	d.
Ayr	52	11	Moray	47	0
Kincardine	52	7	Ross	46	8
Nairn	51	4	Kirkcudbright	46	6
Peebles	50	0	Wigtown	46	3
Linlithgow	49	7	Haddington	45	11
Berwick	48	7	Banff	45	8
Argyll	48	2	Inverness	45	4
Aberdeen	47	11	Sutherland	43	11
Selkirk	47	10	Caithness	36	4
Dumfries	47	5	Orkney	36	0
Midlothian	47	4	Shetland	34	8
Roxburgh	47	1			

In this list Ayr stands high, probably because of its proximity to the industrial area, and because in North Ayr some of the married men were engaged at Martinmas. The high place taken by Kincardine and Nairn may be due to the high cash value of the allowances in those counties.

TABLE VIII. — *Average Total Weekly Earnings of Married Ploughmen between 21 and 60 in the Winter Half-Year 1919-20 in Counties in which the Cash Wage was mainly fixed at Martinmas 1919.*

County	Average total earnings per week		County	Average total earnings per week	
	s.	d.		s.	d.
Perth	60	4	Dumbarton	55	10
Forfar	59	5	Lanark	54	7
Fife	58	9	Bute and Arran.	53	10
Clackmannan	58	1	Stirling	52	5
Kinross	57	2			
Renfrew	56	1	All Scotland . . .	50	3

§ 2. SINGLE PLOUGHMEN BETWEEN 21 AND 60.

A strict comparison cannot be made between the figures for the average cash wages of single men in the different counties, because naturally, where a man lives with his parents and receives his wage almost totally in cash it is much higher than where he lives in a bothy and receives larger allowances, or where he is boarded and lodged at the expense of his employer. It may be remarked, however, that, while the average cash wage for all Scotland for single ploughmen was 35s. 1d., the county averages varied from 19s. 10d. in Orkney to 52s. 1d. in Forfar.

The average value of the allowances was 11s. 2d per week, but varied greatly between the different counties. For instance, in Haddington for 14 single men the average value of the allowances was only 1s. 11d. probably because most of the men were living with their parents or relatives. In Perth, where a large proportion of the men were living in bothies, the average value of the allowances was 15s. 5d.

The average total earnings of the 550 single ploughmen between 21 and 60 were for all Scotland 46s. 3d. per week, that is 4s. less than the average for the married ploughmen between those ages. The highest average weekly earnings were in Forfar, 62s. 4d. and the lowest in Orkney, 34s. 3d.

Table IX (page 297) shows the earnings of single ploughmen.

§ 3. ALL PLOUGHMEN (MARRIED AND SINGLE) BETWEEN 21 AND 60.

Table X (page 298) shows the earnings of all ploughmen (married and single) between 21 and 60.

TABLE IX. — *Average Weekly Earnings of Single Ploughmen between 21 and 60 in the Winter Half-year 1919-20.*

County	Average cash wages per week		Average value of allowances per week		Average earnings per week	
	s.	d.				
Forfar . . .	52	1	10	3	62	4
Kincardine .	44	10	12	5	57	3
Fife	43	7	11	0	54	7
Renfrew. . .	41	6	10	0	51	6
Clackmannan	39	6	11	9	51	4
Perth	35	3	15	5	50	8
Kinross . . .	34	3	15	0	49	3
Dumbarton .	32	2	16	8	48	10
Peebles. . .	32	8	15	0	47	8
Linlithgow	34	7	13	1	47	8
Lanark.	29	11	16	10	46	9
Aberdeen	32	6	14	0	46	6
Ayr	34	3	11	10	46	1
Midlothian	39	9	5	3	45	2
Stirling	32	0	12	6	44	6
Monty	31	0	13	5	44	5
Dumfries	31	2	12	5	43	7
Banff	31	2	12	5	43	7
Nairn	29	3	14	0	43	3
Berwick	39	0	4	2	43	2
Wigtown	35	9	7	0	42	9
Ross and Cromarty .	32	11	9	10	42	9
Haddington.	40	9	1	11	42	8
Roxburgh.	38	1	4	6	42	7
Inverness.	30	6	11	10	42	4
Sutherland	26	0	15	3	42	3
Kirkcudbright. . .	29	11	11	5	41	4
Selkirk.	39	5	1	8	41	4
Bute and Arran.	25	8	15	3	40	11
Argyll	27	7	11	2	38	9
Caithness.	21	9	12	9	34	6
Orkney.	19	10	14	5	34	3
Shetland						
All Scotland . . .	35		11		46	

TABLE X. — *Average Weekly Earnings of all Ploughmen (Married and Single) between 21 and 60 in the Winter Half-year 1919-20.*

County	Average cash wages per week		Average value of allowances per week		Average earnings per week
			d.		
Forfar	47	3	13	6	60
Perth	40	3	17	11	58
Fife	45	4	12	9	58
Clackmannan .	48	2	7	11	56
Renfrew . . .	49	8	5	11	55
Kincardine . .	39	8	15	2	54 10
Kinross . . .	39	11	13	10	53 9
Dumbarton . .	41	5	10	10	52 3
Lanark	41	11	10	4	52 3
Ayr	43	9	7	3	51 0
Stirling . .	43	6	7	2	50 8
Peebles . .	41	10	8	0	49 10
Linlithgow	43	3	6	0	49 3
Nairn . .	32	4	15	10	48 2
Aberdeen .	31	5	15	10	47 3
Midlothian	43	3	3	10	47 1
Berwick .	39	3	7	7	46 10
Dumfries .	39	0	7	8	46 8
Moray .	30	11	15	5	46 4
Selkirk .	40	0	6	3	46 3
Roxburgh .	38	3	7	10	46 1
Wigtown	31	7	14	3	45 10
Kirkcudbright	38	8	7	2	45 10
Ross and Cromarty .	32	11	12	10	45 9
Bute and Arran . . .	30	0	15	6	45 6
Haddington	41	8	3	9	45 5
Banff	30	4	14	3	44
Argyll . .	30	0	14	2	44 2
Inverness .	29	9	14	2	43 11
Sutherland	23	10	19	8	43 6
Caithness .	19	9	16	1	35 10
Orkney . .	19	2	16	2	35 4
Shetland .	27	0	7	8	34 8
All Scotland	38		10	10	49

The average weekly earnings of all ploughmen (married and single) between 21 and 60, were thus for all Scotland 49s. 2d. This figure may be compared with 19s. 8d., the corresponding average given for adult horse-men in the report for 1907 — indicating a rise in cash value of 150 per cent. during those twelve years.

In 1907 the earnings were highest in the counties in the centre of Scotland (Dumbarton, Lanark, Stirling, Clackmannan, Linlithgow, Renfrew and Fife), where, owing mainly to the proximity of coal and iron, industrial activity had been most fully developed. The main reason for the comparatively high earnings in the nine counties at the top of the list in 1919-20 is that in all of them, except Kincardine, the cash wage current in the winter half-year 1919-20 had been fixed about November 1919, while in most of the other counties it had been fixed about May 1919, when current wages were lower.

In 1907 agricultural earnings were lowest in Wigtown and in the northern counties, distant from the centres of industry, and in 1919-20 they were still lowest in the northern counties.

(To be continued).

HOLLAND.

THE REGULATION OF THE WORKING HOURS OF AGRICULTURAL LABOURERS

OFFICIAL SOURCE :

ARBEIDSWED 1919 (*Labour law*). — *Staatsblad van het Koninkrijk der Nederlanden* (Official Journal of the Kingdom of Holland) No 624, 1 November 1919.

OTHER SOURCES :

NEDERLANDSCHE AKKERBOUWERS (*Association of Dutch Agricultural Labourers*). Report of the general meeting of this association held on 14 December 1920. — *Nieuwe Rotterdamse Courant*, 17 December 1920 (morning edition).

KONINKLIJKE NEDERLANDSCHE LANDBOUWCOMITE (*Royal Committee of Dutch Agriculturists*). Report of the general meeting of this committee, held on 12 February 1921. *Nieuwe Rotterdamse Courant*, 13 February 1921 (morning edition).

WETTELIJKE BESCHERMUNG VAN LANDBOUWARBEID (*Legal Protection of Agricultural Labour*). Proposal of the general meeting of the Netherland Union for the Legal Protection of Labourers, held 16 February 1921. — *Nieuwe Rotterdamse Courant*, 17 February 1921 (evening edition).

- WETTELIJKE BESCHERMING VAN ARBEIDERS IN HET LANDBOUWBEDRIJF (*Legal Protection of Agricultural Labourers*). Report of the general meeting of the Netherlands Union for the Legal Protection of Labourers, held 26 February 1921. — *Nieuwe Rotterdamse Courant*, 26 February 1921 (evening edition).
- EERSTE KAMER. STAATSBEGROUING 1921. Hoofdstuk X A (Arbeid). Memorie van Antwoord (*Senate, State Budget, 1921, Chapter X A [Labour]. Answer of the Minister*). — *Nieuwe Rotterdamse Courant*, 3 March 1921 (morning edition).
- BOND VAN MELKVEEHOUDERS (*Dairy Farmers' Club*). Report of the general meeting of the Dairy Farmers' Club, held 9 March 1921. *Nieuwe Rotterdamse Courant*, 10 March (morning edition).
- WETTELIJKE BESCHERMING VAN DER LANDARBEIDER (*Legal Protection of the Agricultural Labourer*). — *Land en Vee*, XV, 10, Roermond, 11 March 1921.
- NEDERLANDSCH TUNNBOWWRAAD (*Council of Dutch Horticulture*). Report of the general meeting of this council, held 22 March 1921. — *Nieuwe Rotterdamse Courant*, 23 March 1921 (evening edition) and 24 March 1921 (morning edition).
- HET ARBEIDSVRAAGSTUK VOOR DEN LANDBOUW (*The Labour Question in Agriculture*). Conclusions of a report drawn up by the Dutch Agricultural Society. — *Nieuwe Rotterdamse Courant*, 20 March 1921 (evening edition).

In the first paragraph of the first article of the Dutch Labour Law, dated 1 November 1919 (*Journal Officiel du Royaume des Pays Bas*, No. 264) exception was expressly made of agricultural labour, sylviculture and stockbreeding. Hitherto agriculture had been entirely free from legal restrictions, but it became known that it had been decided to introduce also into agriculture the system of protecting the labourer which the Law of 1919 introduced into industry.

Protests were soon heard. Important organizations, among which were the Association of Dutch Agriculturists, and the Royal Committee of Dutch Agriculturists, declared themselves opposed to any limitation of working hours.

The general meeting of the first of these two societies, held at Rotterdam on 14 December 1920, went so far as to petition the Government not only to withdraw its bill, but to exempt from the obligations imposed upon them by the law already in force all blacksmiths, wheelwrights, etc., in the country districts. At a meeting of the second of these societies, held at the Hague on 12 February 1921, the following resolution was passed by 57 votes to 12 :

"The delegates at the general meeting of the Royal Committee of Dutch Agriculturists, representing ten agricultural societies, farmers' clubs and associations, together with national and provincial societies of agriculturists, embracing all branches of the agricultural industry ;

"In view of the existence, at the office of the Minister of Labour, of bills relating to the regulation of the working hours in the agricultural industry ;

"In consideration of the fact that under existing economic circumstances the future of Dutch agriculture is very uncertain, and that already in certain parts of our country conditions are such that they take away from many agricultural industries the guarantee of a sufficient re-

turn, and in the belief that attention should be paid to the peculiar character of this industry ;

" Considering that for the good of our country, which is intimately connected with that of the peasant, it is of supreme importance that nothing should be done which would adversely affect the economic development of the agricultural industry ;

" Earnestly request the Minister of Labour to refrain from regulating working hours in the agricultural industry. "

While the delegates of landed proprietors and employers placed themselves on the national standpoint, rejecting every restriction of labour, the Dutch Association for the Legal Protection of Labourers, the president of which is Prof. Mgr. Dr. W. H. Nolens, Dutch representative at the labour conferences of Washington and Geneva, took a wider view of the question. As a preparation for the Third International Labour Conference convened for the end of October at Geneva, a general meeting was summoned, as the directors held that the preliminary questions to be considered before the discussion were sufficient to occupy a special meeting, since in a short time Holland would probably find herself face to face with the problem : How should the legislature contribute to the limitation of the working hours in agriculture ?

In agreement with the members, the directors again arranged for an interchange of views on the question in a report drawn up by six persons who might be considered experts on the subject. In the choice of these experts, the director were actuated by the consideration that the inquiry would not be impartial if the discussion were prepared solely by partisans of the legal restriction of labour and it was therefore necessary to choose experts equally from among the delegates of labour organizations and those of employers. An effort was also made to let the choice fall upon different industries and branches of industries, without however accentuating the differences between them to such a point as to give every form of agricultural industry an opportunity of making itself heard.

To facilitate the work of analysis for the experts, the directors addressed to them the following list of questions :

(1) In what way should the working hours be restricted ? Should they be limited by being fixed per day, per week, or for a longer period ? If the working hours are to be limited, what maximum number of working hours would be accepted in Holland for the various forms of agricultural industry ?

(2) How should overtime work be regulated ? If a maximum number of daily working hours be accepted for a normal amount of work, ought large possibilities to be permitted for doing overtime work ? If the reply be affirmative, should this overtime work be limited to determined periods, and what should those periods be ? Is it possible or desirable to add to the conditions regulating overtime work this condition : that the working hours of men doing overtime work at a certain period should be diminished in just proportion at other times of the year ?

(3) To whom should the application of the restrictions of working

hours be entrusted? To what classes of agricultural labourers should such restrictions be applied? What attitude should be assumed with regard to the members of the family of a small employer who carries on his business without outside assistance?

The meeting called by the Dutch Association for the Legal Protection of Labourers took place at Utrecht on 26 February 1921. Among those present were the Minister of Labour, his Director-general and the Director-general of Agriculture. All the experts gave their opinions clearly and of these we give a resumé:

All were agreed as to the necessity of regulating agricultural labour, but they differed much as to the extent to which it ought to be restricted.

An agricultural expert and farmer was opinion that the maximum duration should be fixed at ten hours per day, chiefly because beyond this limit horses cannot work to their full strength. In winter, the days being short, the working hours would in practice be very much reduced. Thus an average day of nine hours might be calculated, in which time would be included the time spent by the labourer in going to the place where he works and in returning to his home. He would thus be actually at work from 8 to 8 ½ hours. Should the day of nine hours be preferred, power must be given to make the number of hours ten in summer, and reduce them to eight in winter.

Two other agriculturists proposed respectively a basis of eight to nine hours, and a maximum of ten hours which might however be raised to twelve in the months of June, July and August, while the working day would be of eight hours in the months of November, December, January and February.

The two agricultural labourers and the delegate of a Catholic society of horticulturists, stock-breeders and farmers, expressed on the other hand the desire that the basis should be an eight hours day.

One of the agricultural labourers desired an average of seven hours in winter, and nine in summer, in the interest of the workmen, because in summer they must earn more. The Catholic delegate thought that the year might be divided into three periods, to be specified for each branch of industry, for which the duration of work would be six times a week, seven, eight and nine hours respectively. The other workman was of the same opinion, and proposed that the suggested periods should be of four months each.

The milk industry is regulated by the Labour Law of 1919, and must therefore conform to the eight hours day.

The two agricultural labourers and the Catholic delegate alone expressed an opinion about Sunday labour. The delegate was of opinion that this should always be considered as overtime work, except as regards stockbreeding. One workman thought that Sunday work was unavoidable only in dairy farming, but he believed that it might be much reduced by using milk-machines; besides, as it would be necessary to find additional labourers for Sunday, this increase in the number of workers employed would facilitate the solution of the problem of reducing the long day's

work of those employed in stock-breeding. The other workman recognized the necessity of Sunday work for the care and milking of cattle. A working day of four hours might be fixed for Sunday or there might be as many hours of work on Sundays as on week-days, allowing to the labourers four periods of thirty-six hours of rest per month, to be taken in turns.

In any case, the working hours of Sunday should be subtracted from those of the following week.

On the question of Saturday afternoon one of the agricultural experts and one of the labourers were the only persons who expressed an opinion. The first believed that for economic reasons it was impossible to give a holiday on that afternoon, and the second thought the question should be settled by collective agreements. As regards stockbreeding, the difficulty of a fixed working day was generally recognized. One of the agricultural experts asked for ten hours of work. Both labourers spoke in favour of a long rest at noon; one of them, considering seven hours in winter and nine in summer as sufficient, proposed that the hours of work should be from five o'clock to half-past seven and from eight to half-past eleven in the morning, and from four to seven in the afternoon, and he thought that even for workers living at the farm a limitation of the weekly hours of work and fixed hours of rest would be possible.

All the experts agreed that at certain times overtime work is unavoidable.

The first of the agricultural experts thought that it would be necessary to work twelve hours a day during haymaking and wheat harvest. If the working day were fixed at ten hours, it would be necessary to allow overtime work during a period of at least thirty days. If the working day were fixed at ten hours in summer and eight in winter, it would be necessary to count forty-five days of overtime work to be distributed at the pleasure of the employer or by a law specifying the work to be done in this way.

The second expert in the same class rather vaguely advocated overtime work, but only in the case of absolute necessity, and for a higher rate of wages.

One of the agricultural labourers recognized the necessity of overtime work during harvest, perhaps two hours per day for six weeks in the year, and in cases of absolute necessity, always with supplementary payment. The other maintained that certain periods should be fixed for this work, by commissions of experts, and that for an adult workman one hundred hours in the year should be taken as the maximum.

The delegate of the Catholic society would allow two hours a day or eleven hours a week for six weeks, and he asked besides that a certain number of hours should be specified for extraordinary circumstances.

With the exception of the first agricultural expert and one of the agricultural labourers, all the experts were agreed that during the less busy periods a diminution of working hours equal to the overtime work should be allowed. According to one workman the amount might be determined by means of pass-books, in which the name of the employer and the number of hours of overtime worked by the worker should be entered.

In reply to the third question, one of the experts expressed the opinion that the regulation should be put in force by local commissions composed of employers and labourers with an impartial chairman, and without the intervention of officials who were not experts. The delegate of the Catholic society desired that in this matter there should be a common agreement between the employers and the labourers' organisations.

All the experts agreed that the farmer cultivating his own land should have complete liberty of working, and that the labour of children above fourteen years of age should be out of school hours. One of the workmen wished to forbid absolutely all employment of children, another would allow of their being occupied out of school hours, but never before eight o'clock in the morning nor after six o'clock in the evening.

On the question of the work of the wives of peasant proprietors opinions differed. The agricultural experts and one of the labourers disapproved of legislation on this point; the other labourer even declared it to be impossible; the Catholic delegate, while declaring his conviction that the ideal condition would be to do without women's labour altogether, would for the present only require special arrangements for daily periods of rest for the wives and daughters of peasant proprietors.

Two experts considered that young persons should be protected by the law, at least by the prohibition of overtime work. It was most desirable to give young people an opportunity to profit by leisure hours by devoting them to some course of instruction, of training or of religion.

Speaking generally, all were agreed that the regulations as to the number of working hours should be applied to wage-earning workmen, but one workman, in his capacity as expert, wished to except labourers lodged on the farm, as being able to undertake longer hours.

The Catholic delegate and one of the agricultural labourers desired that piece-work, and work done by two together, should be on account and on the responsibility of the employer.

After the reports had been presented a short discussion took place in which the employers maintained that competition with foreign countries would be rendered impossible if the working hours were limited. Thus a national question again took first place, although the meeting was convened in view of an international regulation.

At the close of the meeting — when no resolution could be proposed — the president insisted that the whole world was in perfect agreement that legal restriction of the working hours in agriculture could not be carried out in the same way as in other industries. There might, he said, be some difference of opinion, but scarcely any one would venture to maintain that there is no need for any regulation. The question is to find a solution of the difficulty. A law might be passed to regulate the problem as a whole, but much latitude would have to be given to the commissions which deal with the subject. In conclusion, his general impression was that some regulation is much to be desired, but that the industry must not be injured.

The Minister of Labour was also convinced of the necessity of legal

regulation. He had expressed this opinion on 2 March 1921 in the First Chamber as shown by the report of his reply. On that occasion he even gave it to be understood that the bills might be considered to be ready.

As it is always possible to exercise influence on a bill which has not yet been introduced, various organizations began to discuss in their meetings the future legal regulations.

Thus this question of the regulation of work and working hours was brought forward in the general meeting of the Dairy Farmers' Club in Amsterdam on 9 March 1921. On that occasion the president stated that the workers engaged in the breeding industry desired an increase of salary, not a diminution of the hours of labour. Others speakers, holding opposite views, said that public opinion required the limitation of agricultural labour at least to ten hours and that it would be useless to resist this desire. They acknowledged the real right of the worker as regards this question.

The president maintained his opinion that regulation might be applicable to large industries, but it would be fatal to most of the small farmers who combine stockbreeding with agriculture.

It was resolved to petition the government not to apply any limitation to the hours of work, so that the production of milk should not be hindered.

Land en Vee, the organ of the Catholic farmers of South Holland, in its issue of 11 March 1921, devotes a leading article to the question of working hours; it expresses the desire that the farmers' associations and especially the Dutch Peasants' League (*Nederlandsche Boerenbond*) to which nearly all the Catholic farmers belong, should call a meeting for the discussion of this important subject.

The Dutch Horticulturists' Council (*Nederlandsche Timmbouwwraad*) which contains 70,000 members including nearly all the horticultural employers, also put the question of working hours on the agenda of its general meeting held at Utrecht 23 March. The president said that in this industry, in consequence of the mutual confidence existing between employers and workers, there was no marked opposition between the two, and therefore little or no need of legal regulation. Many other speakers explained that horticulture could not accept a day of eight hours, and that in fact any legal regulation would be useless, considering that after enquiry it was proved that in this industry the duration of work was nearly always limited to nine hours, scarcely ever amounting to ten. The president summed up the discussion as follows: The Horticulturists' Council is of opinion that the condition of this industry is such that it recognizes no reason for legal regulation, and that as a rule collective agreements are sufficient; that nevertheless it takes into consideration that a legal regulation is inevitable; that with regard to this the staff will do their best, and that lastly, the meeting authorizes the central board to do all that is necessary to make the regulation as flexible as possible.

A Committee, nominated by the Zeeland Agricultural Society (*Zeemische Landbouw maatschappij*) to make enquiries as to the diminution of the working hours, formulated the following conclusions in its report:

(1) After establishing the legal regulation of the working day in workshops and factories the Government can scarcely avoid doing the same for agriculture.

(2) In this case it will be necessary to fix a maximum of 60 hours' work per week.

(3) Exceptions must be made to this rule for work done by a farmer on his own land; work in the drying and packing of produce liable to deteriorate; the work of stable-men, the care of cattle and milking.

(4) Special regulations should be made for blacksmiths, wheelwrights, harness-makers, millers and dairy men, unless these are exempted from legal regulation.

(5) It is not desirable that the law should fix the time of the day at which work is permitted.

(6) The carrying out of the law and the supervision should be undertaken with the help of local commissions composed of employers and workmen.

CZECHOSLOVAKIA.

THE EIGHT HOURS DAY IN AGRICULTURE

By M. JACQUES SOUŠEK,

Chief of Section in the Ministry of Social Insurance at Prague.

In Czechoslovakia the principle of the eight hours day was laid down by the Law of 19 December 1918, No. 91, for all kinds of labour, including agricultural labour.

Several orders have been published regulating the application of this law, which came into force on 13 January 1919. As far as agricultural labour is concerned, the working hours of persons regularly employed in agricultural and forestry undertakings, who live apart from the family of the employer and receive a daily, weekly or monthly wage, are limited to eight hours per day of 24 hours and to 48 hours per week.

But according to article 1 of the Ministerial Decree of 11 January 1919 agricultural undertakings or undertakings directly connected with agriculture may take a period of four weeks as the basis for calculating the working hour, instead of a period of a week, provided that the number of hours worked during the four weeks does not exceed 192.

According to article 6 of the law, if the regular work of the undertaking has been interrupted by a disaster or an accident, or if the public interest or other special circumstances require an increase of work and it is not possible to take other steps, the municipal officer may authorize

the prolongation of the working hours. Such overtime work must not, however, continue longer than 20 weeks nor exceed 240 hours in the year.

Work in excess of the normal working day is allowed without special authorization for auxiliary work which necessarily precedes or follows the regular work, such as the heating of boilers, the cleaning of premises, the care of animals, etc.

These provisions allow for the adaptation, without any formality, of the working hours to all seasonal work within the limits of the normal average. Agricultural work is not distributed equally throughout the whole year; there are periods of great activity followed by periods in which there is comparatively little to be done; the overtime work in the busy periods can be compensated for by the reduced hours in the slack season. An equalization of the principal conditions of labour for industrial and agricultural workers is thus possible, and the representatives of the farmers have asked that the eight hours day should apply also to their workmen. The drift of agricultural labourers to the towns and their abandonment of agriculture for industry can be prevented, if the payment for overtime work and the compensating reduction of hours are assured.

Other regulations apply to workers living with the family of the employer.

According to Article 12, employed persons who live with the family of the employer and who are paid by periods longer than a month, or those who render personal services, including those who receive their remuneration in kind, are entitled to 12 hours' rest during the 24 hours, of which at least 8 hours must be continuous for the nightly rest.

The same length of working hours must be observed in respect of persons rendering irregular and not very tiring services, such as foremen, night watchmen and persons in charge of animals.

The employers and the workers can arrange between them the intervals for rest in the course of the work. When the worker lives in the family of the employer he must have at least half an hour's rest at midday.

The worker must enjoy at least once a week an uninterrupted rest of 32 hours. This rest must normally include the Sunday. For persons working in the employer's house, the uninterrupted weekly rest is 18 hours. During this rest, it is only permissible to do urgent work, and in any case the worker must have his liberty on Sunday afternoon. In case of absolute necessity, the Sunday rest may be replaced by an equivalent rest on another day.

An inquiry into the results of the regulation of agricultural labour has evoked widely differing replies.

The Law on the eight hours day is, as we have said, very elastic; in fact, it establishes the eight hours day for large agricultural undertakings, leaving the small cultivators free to work 12 hours per day. Moreover, it allows the free distribution of the working hours over a period of four weeks, and the so-called preparatory work is not taken into consideration. The official authorities have ascertained that the provisions of the law have generally been well observed; they have, however, met with strong

resistance on the part of the employers, who assert that the new law has failed to fulfil its object and has caused, on the other hand, considerable damage. They point out the great difference which exists between agriculture and industry; in agriculture, they say, the work is done in the open air and depends on the season of the year, the length of the day, the temperature, the state of the weather, and on whether the land is situated in the plains or in the mountains. The kind of work to be done frequently changes; there are kinds which must be finished within a certain period whatever the cost, as otherwise the food supply of the country may suffer. Often too, as a result of bad weather, work which has had to be postponed coincides with the most urgent work, while periods of intense labour are followed by slack periods. On the other hand, while the industrial labourer works in closed premises, which justifies the reduction of the working hours from the point of view of health, the agricultural labourer works continually in the open air and his health is consequently not in danger. The conditions are somewhat different, it is true, in the case of forestry undertakings, in which the work does not depend either on the weather or on the season.

The employers add that since the war the productivity of the workers has diminished and that the law has, so to speak, favoured the slackening of effort which is everywhere noticeable. If the working hours which were formerly in vogue had been maintained, the diminution of productivity would not have been so great. The reduction of the working day results, then, in appreciable losses. It necessitates also the increase in the number of workers employed, which adds disproportionately to the general expenses and make agricultural produce dearer still. As to the small farmers, they are compelled to supply all the work which their holdings require either themselves or with the help of their families, for they cannot pay the wages of the workers of whom they have need.

According to the employers, the workmen have not understood the meaning of the Law on the eight hours day: they have reduced the day to six hours by treating as part of the working hours the time spent in going to the farm and in returning home. They have refused to work overtime, or have insisted on conditions which the employers could not accept. Here, it is true, it would be inaccurate to generalize; cases of the kind, however, have been fairly frequent.

The workers have hailed the application of the eight hours day with great enthusiasm. They assert that they have always worked more than the legal hours, according as the necessity made itself felt. According to them, the present regulation marks a progress over the past. The work is done quite as quickly, for it is done as piece-work, and it is to the interest of both employer and worker that it should be finished as soon as possible.

The free time left to the agricultural labourer is employed in working on his own plot of ground or in working for another employer. Very rarely do they employ this time in improving their education or in resting. The inquiries made have shown that, in many cases, the free time and

the high wages contribute much to dissipation and consequently to misery.

The results which might follow from a modification of the Law on the eight hours day are somewhat doubtful, in view of the increased wages which it would be necessary to give. The most effective means would, perhaps, be to increase the return from the work of the labourers and to remove from their midst the agitators who lead them astray. The farmers maintain the following point of view: the increase of production necessarily interests the State and the consumer even more than the employer. If this interest were generally understood, the provisions of the law at present in force would perhaps be sufficient, particularly as the law is somewhat elastic and as an equitable remuneration might be assured for the overtime work. On the other hand, if no agreement is arrived at between the interested parties, it is to be feared that the farmers will pass from intensive production to extensive production, which would cause serious damage to other classes of workers. In any case during the season when the work depends on natural factors it is necessary to fix longer working hours and to assure, by means of special provisions, suitable wages calculated on the basis of the eight hours day; at the same time, it is necessary to devise methods for obtaining a higher return from the labour.

Although the opinions of the employers and of the workers are not completely in agreement, it appears that the working hours are usually counted as the Law prescribes, but that occasionally the interval for rest and the time which the worker spends in going to and from the farm are counted in the working hours. As to the provision of the Law whereby 192 hours of work can be freely distributed over a period of four weeks, the overtime hours being compensated for by an equivalent rest without increase of wages, it has not succeeded, because the workers prefer the payment of their wages by the week. Besides, when the seasons are uncertain and the occupation of the day-labourers is regular, the work is necessarily done according to the weather and the needs; overtime work is then indispensable and must be paid for, instead of being compensated for by an equivalent amount of supplementary rest.

As to whether eight hours work is sufficient to enable the necessary work to be duly carried out, it is recognized that for many kinds of work the eight hours day is not suitable; on the other hand, when there is no hurry in carrying out a particular piece of work, the system of overtime is satisfactory.

Undoubtedly the introduction of the eight hours day in agriculture has contributed to the rise in wages, but it is difficult to say in what degree, the rise in the cost of living having also helped to bring about the same result. As to agricultural produce in particular, it seems clear, however, that before the war the remuneration of labour only represented 16 per cent. of the price, whereas it now represents three fifths.

The land was far from being cultivated at the proper time during the past two years, but numerous causes explain this fact; in particular, the

weather was bad and the labourers had lost, during the war, the habit of working, which they will gradually regain.

The complaints of rural depopulation have ceased, but the retention of the workers in the country seems attributable less to the diminution in the working day than to the improvement of the food-supply. On the other hand material conditions are better and the future is looked forward to hopefully.

If the conclusions of the interested parties are divergent, it is because the overtime work has been considered as a violation of the Law, notwithstanding the contrary opinion expressed by the Government. In the end it has been agreed to recognise that uniform working hours during all seasons are not possible in agricultural work. It is precisely with a view to allowing a distribution of work according to the needs of cultivation that the Law gives the interested parties the possibility of distributing 192 hours of work over a period of four weeks. To sum up, the inquiry has shown that the eight hours day can be applied to agriculture, but that the exaggerated pretensions of the workers have roused an opposition amongst the employers which has not yet calmed down.

II. — LAND SYSTEMS

UNITED STATES.

LAND SETTLEMENT IN CALIFORNIA.

OFFICIAL SOURCE:

REPORT OF THE STATE LAND SETTLEMENT BOARD OF THE STATE OF CALIFORNIA, SEPTEMBER 30, 1920. Sacramento, 1921.

OTHER SOURCE:

MEAD (Elwood): How California is helping People own Farms and Rural Homes. University of California College of Agriculture Agricultural Experiment Station Circular No. 221, August 1920.

§ I. A NEW LAND SETTLEMENT POLICY

With the passing of the State Land Settlement Act in 1917 the State of California embarked upon a new policy in regard to the settlement of the land. The principal purposes of the Act are to provide employment and rural homes for ex-service men, to promote close agricultural settle-

ment, to assist deserving and qualified persons to acquire small improved farms, and to provide homes for farm labourers. Ex-service men who are qualified to succeed are given preference over civilian applicants for land.

The reasons which induced the State to adopt this policy, according to a pamphlet issued by the University of California College of Agriculture, may be thus summarized:

Until the end of the nineteenth century free or very cheap land was the foundation of American democracy. It influenced the scale of wages for all workers. Men who did not feel content as wage earners became their own employers on a homestead. It fostered the hopeful, confident and independent spirit of the people. When the free fertile land was taken up, farms began to rise rapidly in price. The money which would have bought a farm twenty years ago is now absorbed in the first payment. The cost of farm improvements has risen with land values: a water right often costs more than the former price of both land and water.

Something is needed which will do for economic democracy what was formerly achieved by the free homestead. Free land is not possible, but a generous system of credit will provide the opportunity needed for those who are willing to work and to save. Under such a plan young men and women who have a little capital can start life on farms of their own and pay for them with money earned out of the crops. The settlers need not hesitate to make improvements as the tenure is secure. If to the suggested credit system is added an organized community life, which will break down the barriers of religion, customs, racial habits and language a higher rural civilization will be evolved than can arise out of unorganized development.

The proposed system will also rescue the tenant farmer from having to spend his life in farming land which someone else owns, and so will avert the growing dangers and evils of tenancy. From being a nation of farm owners, the United States is rapidly becoming a nation of tenant cultivators. Half of the land in some of the richest agricultural states is now farmed by tenants. As a rule the leases are short, most of the tenants remaining only one or two years on a single farm. In this and in other particulars, the conditions of the tenants are worse than they are in European countries because law and custom has not thrown safeguards around tenancy in the United States as they have done where it is an older institution.

§ 2. HOW THE LAND IS SOLD.

Under the Land Settlement Act, land is sold either as farm allotments, of a value not exceeding, without improvements, \$15,000, or as farm labourers' allotments, of a value not exceeding, without improvements, \$1,000. Not more than one farm allotment or farm labourer's allotment shall be sold to any one person.

Applicants must be citizens of the United States or have declared their intention to become citizens. The Land Settlement Board reserves the

right to reject at its discretion any or all applications. No applicant must be approved who does not satisfy the Land Settlement Board as to his or her fitness successfully to cultivate and develop the allotment applied for. In the selection of settlers these qualifications are given great weight.

The settler must have enough money to pay 5 per cent of the cost of the land. He should also have enough money to buy a working equipment of tools and livestock. What this minimum capital should be depends in some measure on the acreage of the land taken and the kind of agriculture the settler intends to follow. The Land Settlement Board does not believe that anyone should attempt to buy one of these farm allotments who has less than \$ 1,500 capital, or a working equipment of implements and livestock which is the equivalent of such capital.

There is no maximum limit to the money a settler may have, but a settler must not be the holder of agricultural land elsewhere, or of possessory rights thereto, to the value of \$ 15,000 and must not by this purchase become the holder of agricultural land or of possessory rights thereto exceeding \$15,000.

The farm labourer can safely undertake the purchase of a two to four acre farm labourer's allotment if he can make the initial payment. The semiannual payments will be less than the rent he would have to pay for a house in town. The industrious man can save enough out of his wages to meet these payments and so does not need a working capital. Farm labourers are, therefore, accepted who are in a position to meet the initial payment.

Five per cent of the cost of the land must be paid at the time of the purchase. Payment of the remainder of the purchase price of land can, if desired, be made in 73 semiannual payments extending over 36 ½ years with interest at the rate of 5 per cent. per annum, payments of principal and interest to be made semi-annually. These payments will be amortized in accordance with a table approved by the Federal Farm Loan Board. If settlers desire they can make a larger initial payment or they can pay off any number of instalments of the principal at any instalment date after five years from the first payment.

The settler, on making the initial payment, is given a contract of purchase which sets forth the conditions of payment and the obligations a settler assumes. He is given a deed to the land when payments are completed and all other conditions of the purchase contract have been fulfilled.

Every contract entered into between the Board and an approved purchaser will contain provisions that the purchaser shall cultivate the land in a manner approved by the Board and shall keep in good order and repair all buildings, fences and other permanent improvements situated upon his allotment. Each settler must, if required, insure the buildings on his allotment against fire.

No allotment sold under the provisions of the Land Settlement Act can be transferred, assigned, mortgaged, or sublet, in whole or in part, without the consent in writing of the Land Settlement Board, until the

settler has paid for his farm allotment or farm labourer's allotment in full and complied with all the terms and conditions of his contract of purchase

In the event of a failure of the settler to comply with any of the terms of his contract of purchase and agreement with the Board, the state and the Board have the right to cancel the contract and agreement, and the settler forfeits all right to the property, all payments made by him being deemed to be rental paid for occupancy. The Board can proceed to enter into a new contract of purchase in respect of the forfeited land.

Actual residence on any allotment sold must commence within six months from the date of the approval of the application, and shall continue for at least eight months in each calendar year for at least ten years, unless illness or some other cause satisfactory to the Board prevents. In case any farm allotment disposed of is resold by the State, the time of residence of the preceding purchaser may, in the discretion of the Board, be credited to the subsequent purchaser.

§ 3. IMPROVEMENTS.

Where settlers have enough money to make needed improvements they will be expected to do this. Improvements to enable farms to be brought into full production in the shortest possible time are, where necessary, made by the Board. At the time of purchase 40 per cent. of the cost of the improvements must be paid, and the repayment of the remainder may extend over a period of 20 years.

At any time prior to the end of the fifth year after the commencement of the settler's purchase contract, the Land Settlement Board may give him the following aid:

- (a) Prepare all or any part of such land for irrigation and cultivation.
- (b) Seed, plant or fence such land, and cause dwelling houses and out-buildings to be erected on any farm allotment or make any other improvements necessary to render the allotment habitable and productive, the total cost of such improvements not to exceed \$1,500 on any one allotment.
- (c) Cause cottages to be erected on any farm labourer's allotment and provide a domestic water supply, the combined cost of cottage and water supply not to exceed \$800 any one allotment.
- (d) make loans to approved settlers on the security of permanent improvements, stock or farm implements, the total amount of any such loan, together with money spent by the Land Settlement Board on improvements, not to exceed \$3,000 on any one farm allotment, or \$2,000 on any one farm labourer's allotment.

§ 4. THE SETTLEMENTS ALREADY CREATED.

The Durham Settlement. — The first settlement created under the Land Settlement Act was in Butte County, about half a mile from Durham, a village of about 500 people. Two railroads connect the settlement with

the State capital and the state highway runs through Durham. Of the 6,200 acres of land purchased, 360 acres have been leased for three years, and about 700 acres is too high to be irrigated by gravity. Neither the leased lands nor the high pasture lands have been sold. The settlement therefore embraces about 5,000 acres and on this 90 farmers and 26 farm labourers have been settled.

The first step after the purchase of the land was to make it ready for settlement. To do this, a soil survey was made and a soil map prepared which showed the land which was best adapted to the growing of grain, fruit, alfalfa and vegetables. On the basis of this map the different allotments were subsequently valued. A contour survey was made giving every change of elevation of six inches. This was of use in laying out the irrigation ditches and levelling the surface of the different farms so that water would flow over it evenly. A subdivisional plan of the area was then made and when the boundaries of the different tracts had been marked out the farms were valued.

It was necessary that the total sum received from the sale of the land should equal the amount paid for it, plus the amount that had been expended in building the irrigation system and the estimated amount of money needed to cover further expenses and possible losses. All these expenses have to be provided for, as the enterprise must be self-sustaining. The state gives nothing; it lends money to the Board at 4 per cent. The whole cost of land, roads, irrigation system, etc., worked out at an average cost of \$173 an acre and the different farms had to be valued with a view to making them all equally attractive, the whole realizing this average price.

When valued there was a wide range in prices on the different farms, the lowest being \$75, the highest \$235 an acre. So well had the valuations been made that every farm was the first choice of some applicant. The average value of the farms is \$8,800 and of the farm workers' allotments \$400.

Before the land was thrown open to settlement it had been examined by the experts of the State Agricultural College, who advised the settlers to adopt a combination of dairying, stock raising and the growing of fodder crops, of which alfalfa is the most important. For this kind of farming, co-operation in buying and selling was important, and a co-operative stock-breeders' association was accordingly formed. One breed of dairy cattle was adopted, it was agreed to use only pure-bred sires and a buying committee was elected which has purchased all the animals now on the settlement.

A dairymen's association has also been formed through which all the dairymen at Durham market the whole milk or cream which they produce.

The same principle of organized co-operation has been applied in the development of the farms. The Land Settlement Board employed a farmstead engineer, who with competent assistance bought all the material needed for houses at wholesale prices for cash, made the plans and supervised the erection of the houses. This left the settlers free to increase their first year's income by growing more crops and gave them better-built and more attractive houses than is the rule in unorganized development.

The capital of the farmers at Durham varied from \$1,500 to \$15,000, the average being \$6,700. The capital of farm labourers varied from \$20 to \$4,700.

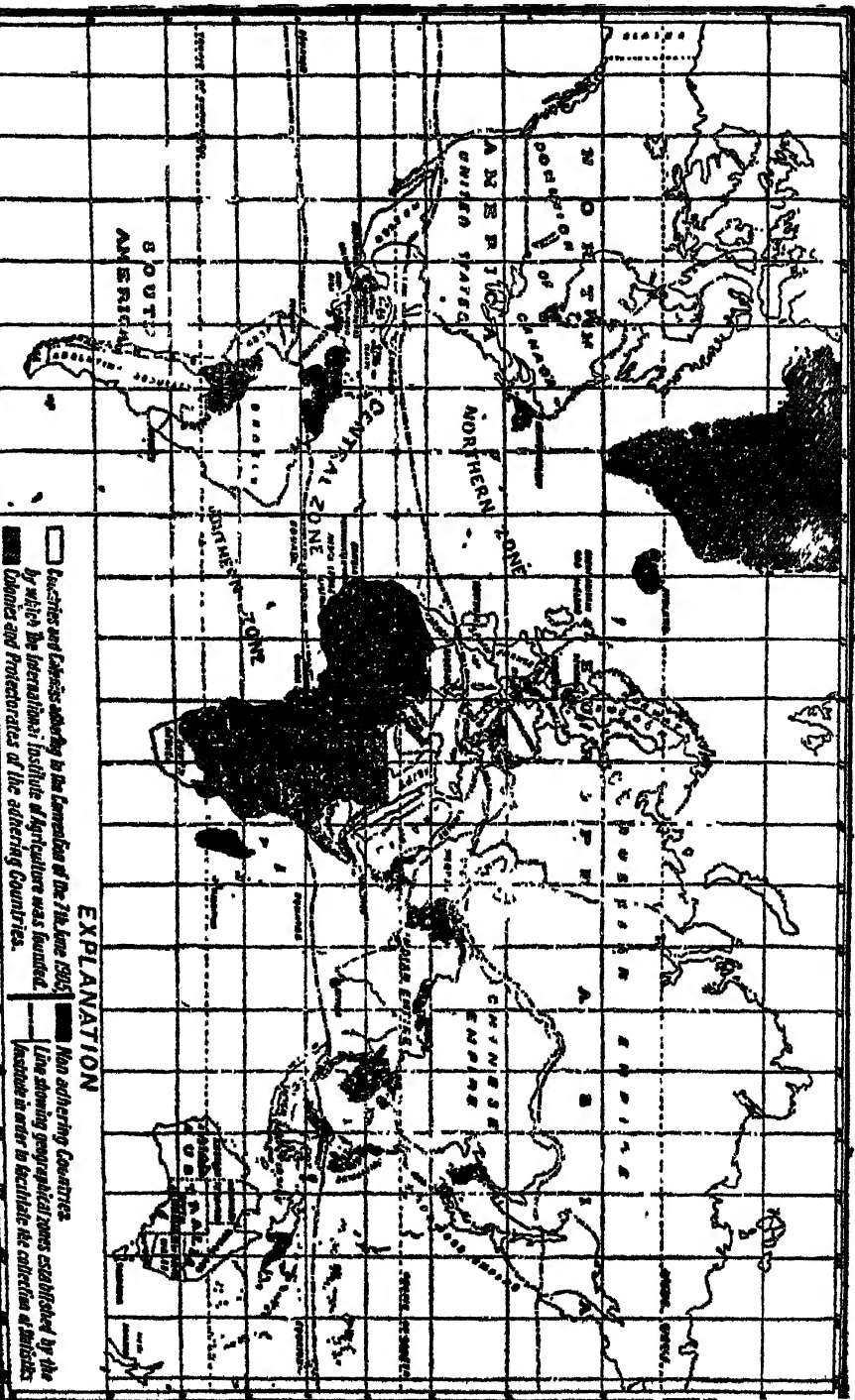
When the Board purchased the land in the spring of 1918 no one had lived on it but tenants or hired labourers for 20 years. Now there are about 120 families with more than 200 children, all living in comfortable houses, cultivating farms that are in most cases fully improved and on which there are many excellent dairy herds. The stock-breeders' association owns seven registered Holstein bulls and several herds of pure bred stock have been started. A number of orchards have been planted. On the farm-labourers' allotments more produce has been grown than was required for local consumption and it is proposed to organize the labourers into a small association for the marketing of their surplus vegetables.

The average income of settlers who have been on the farms for a year is over \$2,000. They have met their payments to the state and they are in good condition to be able to continue to do so. The total indebtedness to the state of the settlers at Durham is about \$900,000 and the total arrears on 30 June 1920 was less than \$10,000 or about 1 per cent. The surplus of assets over liabilities as shown by the last audit of the State authorities is \$185,000.

The Delhi Settlement. — Another settlement is being formed at Delhi in Merced County, where the Land Settlement Board purchased 8,570 acres. Two railroads and the state highway cross the land, and two railway stations are situated upon it. It has a good water supply from the Turlock Irrigation District. The surface of the land is too undulating for transporting water in open ditches and arrangements have, therefore, been made for the delivery of part of the irrigation water in concrete pipes.

The Settlement Board decided to subdivide and sell the Delhi lands in four units, the rate of settlement depending on the progress made in the works for distributing the water. Farms and farm labourers' allotments in the first unit were sold to settlers on 27 April 1920 and in the second unit on 16 October 1920. Sixty-seven farm allotments and forty-seven farm labourers' allotments were contracted for by settlers. Of the first 99 allotments sold, 64 were taken by ex-service men and 35 by civilians, some of the latter being parents of ex-service men.

The settlers at Delhi have organized a co-operative association. Four committees have been appointed by this association, including a committee to purchase fruit-trees and vines and a committee to purchase live stock, particularly dairy cows and hogs. The settlers have chosen Holsteins as the official breed of dairy cows and Duroc Jerseys as the official breed of hogs for the colony.



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THE INTERNATIONAL INSTITUTE OF AGRICULTURE

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The International Institute of Agriculture was established under the International Treaty of 7 June 1905, which was ratified by forty governments. Nineteen other governments have since adhered to the Institute.

It is a Government institution in which each country is represented by delegates. The Institute is composed of a General Assembly and a Permanent Committee.

The Institute, always confining its attention to the international aspect of the various questions concerned, shall :

(a) collect, study and publish as promptly as possible, statistical, technical, or economic information concerning farming, vegetable and animal products, trade in agricultural produce, and the prices prevailing in the various markets ;

(b) communicate the above information as soon as possible to those interested ;

(c) indicate the wages paid for farm work ;

(d) record new diseases of plants which may appear in any part of the world, showing the regions infected, the progress of the diseases, and if possible, any effective remedies ;

(e) study questions concerning agricultural co-operation, insurance and credit from every point of view ; collect and publish information which might prove of value in the various countries for the organization of agricultural co-operation, insurance and credit ;

(f) submit for the approval of the various governments, if necessary, measures for the protection of the common interests of farmers and for the improvement of their condition, utilizing for this purpose all available sources of information, such as resolutions passed by international or other agricultural congresses and societies, or by scientific and learned bodies, etc.

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PRINCIPAL WEIGHTS, MEASURES AND MONEY OF THE VARIOUS COUNTRIES AND THEIR BRITISH EQUIVALENTS

1 Cadastral arpent (Hungary)	=	1.42201	acres
1 Centimetre	=	0.393715	inches
1 Cho (60 ken) (Japan)	=	119.30327	yards
1 Crown (100 heller) (Austria-Hungary)	=	10 d.	at par
1 Crown (100 öre) (Denmark, Norway, Sweden)	=	15.1 $\frac{1}{8}$ d.	at par
1 Deciatine (2 tchetwert, (Russia)	=	2.69966	acres
1 Dinar, gold (100 para) (Serbia)	=	933/64 d.	at par
1 Dollar, gold (\$) (100 cents) (United States)	=	45.5/16 d.	at par
1 Drachm, gold (100 lepta) (Greece)	=	933/64 d.	at par
1 Egyptian Kantar	=	99.0498	lbs.
1 Feddan Masri (24 Kirat Kamel) (Egypt)	=	1.03805	acres
1 Florin, gold, or Gulden (100 cents) (Netherlands)	=	15.753/64 d.	at par
1 Franc (100 centimes) (France)	=	933/64 d.	at par
1 Gramme	=	0.03527	oz.
1 Hectare	=	2.47109	acres
1 Kilogramme	=	2.2	lbs.
1 Kilometre	=	1093.613	yards
1 Kokou (10 To) (Japan)	=	1.58726	quarts
1 Lei, gold (100 bani) (Rumania)	=	983/64 d.	at par
1 Leu (100 stotinki) (Bulgaria)	=	933/64 d.	at par
1 Lira (100 centesimi) (Italy)	=	933/64 d.	at par
1 Litre	=	0.21998	gallons
	=	0.0275	bushels
1 Mark (100 Pfennige) (Germany)	=	11 3/4 d.	at par
1 Mark (100 penni) (Finland)	=	933/64 d.	at par
1 Metre	=	3.28084	feet
1 Milreis, gold (Brazil)	=	25.261/64 d.	at par
1 Milreis, gold (Portugal)	=	45.519/64 d.	at par
1 Peseta, gold (100 céntimo) (Spain)	=	933/64 d.	at par
1 Peso, gold (100 centavos) (Argentina)	=	35.1137/64 d.	at par
1 Pound, Turkish, gold (100 piastre) (Ottoman Empire)	=	185.015/64 d.	at par
1 Pund (Sweden)	=	0.93712	lbs.
1 Quintal	=	1.96843	cwts.
1 Rouble, gold (100 kopeks) (Russia)	=	25.1 3/8 d.	at par
1 Rupee (16 annas) (British India)	=	$\frac{1}{10}$	of £1 (gold)
1 Talari (20 piastre) (Egypt)	=	45.111/32 d.	at par
1 Verst (Russia)	=	1166.64479	yards
1 Yen, gold (2 fun or 100 sen) (Japan)	=	25.037/64 d.	at par
1 Zentner (Germany)	=	110.23171	lbs.

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Part I: Co-operation and Association

CZECHOSLOVAKIA.

THE CO-OPERATIVE MOVEMENT

by L. F. DVORÁK

Doctor of Laws, Manager of the Central Union of Agricultural Co-operative Societies, Prague.

§ 1. THE PLACE OF CO-OPERATION IN THE NATIONAL ECONOMY.

In the years 1850 to 1860 appeared the three great promoters of co-operation in the Czech countries. Šimáček zealously promoted the formation of civic loan banks (*občanské záložny*), urban credit institutions of the Schultze-Delitsch type; Chleborad organized co-operative distributive societies amongst the working classes and lastly, in the country, in the district of Hradec Králové, Kampelík, doctor of medicine, began to propagate the idea of mutual savings and loan societies (*spořitelní a záložní spolky*) for the benefit of needy peasants. Whereas in the early years of the co-operative movement in Bohemia, the civic loan banks developed rapidly, the co-operative distributive societies and the co-operative agricultural societies only attained their present importance in the national economy of Czechoslovakia about the year 1890.

1. *Popular Municipal Financial Institutions.* — The economic position of the Czech countries, about 1860 and 1870, was such that the middle classes of the towns furnished the most favourable field for the creation of collective undertakings. At that time the towns, in the Czech countries, were beginning to feel the effects of industrialism. The nucleus of the town population consisted of artisans and shopkeepers. The influence of national and foreign industry was beginning to make itself felt, strengthened

as it was by the commercial treaties, based on freedom of exchange, which had been made by Austria-Hungary with England and other countries. It must be noted that amongst the Czechs credit institutions were completely lacking at that time. The operations of the Savings Banks consisted chiefly in mortgage loans. It is not, therefore, surprising that the ideas of Schultze-Delitsch found a fertile soil amongst the Czechs of the towns, who saw in it a means of economic and national uplift. It must be observed that the Germans in the Czech countries remained in this matter far behind the Czechs, owing to the fact that amongst them the Savings Banks were much more highly developed. Thus one finds, for example, that in 1874 there were in Bohemia 307 Banks of the Schultze-Delitsch type, of which 226 were Czech and 81 were German, while, on the other hand, there were 70 Savings Banks, of which 26 were Czech and 44 were German. In Moravia in the same year, there were 218 civic loan banks, of which 192 were Czech and only 26 were German ; but of 30 Savings Banks there were only 11 Czech, while the remaining 19 were German. In Silesia, there were 15 civic loan banks, of which one was Czech and one Polish, the remainder being German ; the 12 Savings Banks were all German. In the aggregate, therefore, there were, in the Czech countries, 419 Czech civic loan banks and 120 German ; as to the Savings Banks, there were 75 German and 37 Czech.

At the present day, the civic loan banks form an important factor in the national economy of Czechoslovakia. At the end of 1917 there were in Bohemia, Moravia and Silesia 902 civic loan banks, with 308,100 members, capital amounting to 30,244,000 crowns, reserve funds amounting to 70,025,000 crowns, and deposits amounting to 1,201,010,000 crowns. The German loan banks numbered 429 in 1917 ; in 1913, they had 92,508 numbers, capital amounting to 2,311,000 crowns, reserve funds amounting to 17,600,000 crowns and deposits amounting to 297,377,000 crowns.

2. *The Co-operative Distributive Movement.* — Almost simultaneously with the formation of the Schultze-Delitsch Banks, Chleborad began actively to promote distributive co-operation, having the same objects as those pursued by the Rochdale Pioneers. This movement, arising in the towns, also spread to the country. Although it was due, in the main, to the deplorable conditions of the factory workers and although it found a favourable field and a justification in the bad economic conditions of the country about 1870, it quickly disappeared. In 1867 there were in the Czech countries 34 co-operative societies and in 1872 there were 438, of which 352 were Czech and 86 were German. In 1875 their number had fallen to 225 ; in 1880 only 79 remained and most of these disappeared in their turn in the years which followed. The economic conditions necessary for their development did not exist. With the disappearance of the exceptional conditions due to the crisis of 1873, the advantages of the co-operative distributive societies also disappeared ; they had not a sufficient number of members nor had they expert managers capable of directing their business. For twenty years, the co-operative distributive societies disappeared altogether. They only reappeared towards 1890, when

conditions had completely changed. They are now formed in the great industrial centres of Bohemia, Moravia and Silesia, where large factories are steadily increasing in number. The idea of distributive co-operation has, this time, been applied by persons of sufficient experience, having a business training and entirely devoted to the cause. In 1918 there were 287 Czech co-operative societies with 127,408 members and a turn-over of 73,873,000 crowns; they had capital amounting to 3,231,000 crowns; their reserve funds totalled 2,544,000 crowns and their liabilities amounted to 19,686,000 crowns. On the other hand, the German co-operative societies numbered 290 and had 151,347 members in 1916; their turn-over was 53,612,000 crowns; their capital amounted to 3,231,000 crowns; their reserve funds totalled 2,870,000 crowns. Their assets amounted to 18,547,000 crowns. The co-operative distributive societies which were mainly Polish numbered 17 and had 6,514 members; their turn-over was 3,530,000 crowns; their capital, 494,000 crowns; their reserve funds, 448,000 crowns; and their assets 2,203,000 crowns. The Wholesale Society, with headquarters at Prague, which was formed by the Czech distributive co-operative societies rapidly developed. In 1912 it supplied to its members, who are the local co-operative distributive societies, goods to the value of 2,178,000 crowns; in 1918, goods to the value of 37,206,000 crowns and in 1919 to the value of 290,000,000 crowns.

As a result of the great success of these societies, almost simultaneously with the achievement of political independence other classes besides the working classes took up the idea of co-operation; co-operative distributive societies were formed by the employes of various undertakings and of public and private administrations. These Czech societies numbered 110 in 1920; they had 42,409 members and supplied 165,000 persons; their capital amounted to 3,000,000 crowns; they were federated in a Wholesale Society of the Employes' Co-operative Societies, with headquarters at Prague, the turnover of which was 97,000,000 crowns in 1919. The idea of co-operation was adopted, too, by the political parties amongst which it had not previously penetrated very deeply. As a consequence, in many towns and industrial centres, co-operative distributive societies are formed according to the political complexion of their members — a system which obviously has disadvantages. Even if many of these undertakings afterwards disappear, they cannot fail, however, to instil the co-operative idea into the minds of classes amongst whom it would otherwise only have penetrated very slowly. The co-operative societies of the Social-Democratic Party federated in the Central Union of Czechoslovak Co-operative Societies, with headquarters at Prague, are the most highly developed. At the end of 1919 they numbered 700, contained about 250,000 members and had a turn-over of 270,000,000 crowns, while in 1918 they only numbered 433 and their turn-over was 94,000,000 crowns.

The other socialist party, the Czechoslovak Socialist Party, is at present forming many co-operative societies; in 1919, it formed about 250 societies, which supply goods to about 200,000 persons. It has also formed 56 co-operative building societies and some co-operative societies

of small landowners, federated in the Czechoslovak Union of Small Landowners' Co-operative Societies. The title of this federation does not, however, correspond to its membership; in fact, the greater number of its members are urban co-operative distributive societies. To strengthen their societies financially, the two Unions of which we have spoken established in 1919 co-operative banks in the form of share companies, but their financial capacity has hitherto been somewhat limited.

Lastly even the conservative party, called the Czechoslovak Popular Party, is beginning to form co-operative distributive societies. Independently of this activity, which is largely political, the agricultural co-operative societies, notably the co-operative supply societies and the Raiffeisen societies, even before the war, but more particularly during the war, extended their field of action to the purchase for members of articles of daily consumption. The principal organizations of the small Czech landowners do business with these societies.

3. *Artisans' Co-operative Societies and Workmen's Co-operative Societies for Production and Sale.* — The artisans' co-operative societies and the workmen's co-operative societies for purchase and for the production and sale of various articles and their auxiliary co-operative societies have had relatively less success. The exceptional qualities of solidarity, of education and of commercial skill which these co-operative undertakings require in their members have prevented them from developing more successfully. However, thanks to combination with the co-operative distributive societies, which are well organized, and thanks to the tendency to concentration which appears in most industrial enterprises, it may be expected that these societies will acquire business stability and greater financial strength. In 1910 there were in all 251 Czech co-operative societies of this group (societies for the purchase of raw materials and sale of manufactured products, productive societies, mechanical societies, co-operative stores, and other societies); they had 22,311 members, including for the most part associations of shop-keepers and manufacturers and they sold goods to the value of 31,485,000 crowns. Their capital amounted to 6,459,000 crowns; their reserve funds to 1,108,000 crowns, and their assets to 24,496,000 crowns. Although these societies have, in the different branches of production a relatively small importance, this class of society should not be underestimated. Since political independence has been achieved, they have grown considerably, often rapidly. The commercial co-operative societies, numbering 17, have formed their own Federation at Karlin, near Prague.

4. *Co-operative Building Societies.* — The co-operative building and housing societies have made rapid progress, particularly before the war, thanks chiefly to the work of M. J. Losták, former manager of the Provincial Bank (*Zeimská banka*). The rapid growth of the towns, more particularly of the Czech towns, which since 1900 have become industrialized with ever increasing rapidity, affected disastrously the housing conditions of the workers and employés. When, thanks to the support of the State, facilities were given to them for obtaining mortgage credit, the work of the co-opera-

tive building societies developed very rapidly, so that in a very short time all the Czech towns had their colonies of dwelling-houses. In 1912 there were 393 of these societies; they numbered 18,252 members and received rents amounting to 1,469,000 crowns; their capital amounted to 2,742,000 crowns, their reserve funds to 350,000 crowns, and their assets to 32,029,000 crowns including land and buildings to the value of 18,516,000 crowns. In view of the severe housing crisis which has occurred since the war, a great number of these societies has been formed, with the aid of the State, in the different parts of the Republic.

5. *Co-operative Agricultural Societies.* — It is amongst the agricultural classes that the co-operative idea has had relatively the greatest success. It has been applied in many ways: to the organization of credit (co-operative credit societies with unlimited liability of the Raiffeisen type); to the sale of crops and other agricultural produce (co-operative grain stores, co-operative dairies, co-operative distilleries, co-operative potato-flour societies, co-operative chicory-drying societies, co-operative societies for the cultivation and sale of vegetables and herbs, etc.); to the purchase of agricultural requisites (co-operative supply societies); to the purchase of domestic requisites (co-operative distributive societies); to the joint use of plant for facilitating agricultural production (co-operative societies for the use of machinery, co-operative societies for the supply of electricity, co-operative building societies, etc.). The 3,600 Czech agricultural co-operative societies number 400,000 members and possess assets to the value of 700,000,000 crowns. As the members of these societies are, for the most part, fathers of families, and each family may be calculated as containing 5 members, it may be estimated that more than 2,000,000 inhabitants of the Czech rural districts, in Bohemia, Moravia and Silesia, are interested in these co-operative agricultural societies. Speaking only of agriculturists, it may be said that out of every five Czech farmers, three are directly interested in the co-operative societies.

§ 2. CHARACTERISTICS OF AGRICULTURAL CO-OPERATION IN CZECHOSLOVAKIA.

1. *Characteristics of the Kampelický Co-operative Credit Societies.* — In Czechoslovakia, as in the whole of Central Europe, agricultural co-operation has been applied in the first instance to credit operations. The so-called "Kampelický" co-operative credit societies form, then, the mainstay of co-operation. They do not confine themselves to receiving deposits, handing over the surplus to the central banks, or to making loans, but (and it is their great economic merit) they become also teachers and instructors in all that concerns the use of credit in general. They thus give the impulse to social progress in the country districts at the same time that they facilitate the economic emancipation of the agricultural labourers, farmers and peasants. Their value lies not only in the material advantages which they secure for their members, but in their promotion of co-operative loyalty, of discipline, of the spirit

of solidarity and of sound economic principles in general. They furnish credit on the most advantageous terms, at a rate of interest which varies as little as possible. The majority of the deposits did not exceed 500 crowns before the war; the loans, too, were for the most part for small sums. The officers are all honorary and receive no remuneration for their services. In addition to supplying credit for working expenses, the Kampeličky co-operative credit societies helped the farmers, before the war, to change disadvantageous forms of mortgage credit into new forms answering better to all the requirements of modern mortgage credit. Almost all the Kampeličky credit societies, too, represent the National Old Age Insurance Fund in relation to the farmers and the country districts in general.

The Kampeličky societies have become veritable rural economic communities. Their members are recruited not only amongst the cultivators of small and medium-sized farmers, but also amongst the agricultural labourers, the rural artisans, the clergy, the teachers and other officials and employés. According to the statistics compiled by the Central Union of the Czech Agricultural Co-operative Societies of Bohemia, the 133,000 members of the Kampeličky societies affiliated to that Union in 1912 were thus divided: Farmers 50 per cent.; artisans who were also farmers, 13 per cent.; artisans, 8 per cent.; labourers, 22 per cent.; other occupations 7 per cent.

On the basis of the solid co-operative organization of credit, other agricultural co-operative undertakings have sprung up. Thanks to the Kampeličky societies, which obtained for him an easily accessible credit for working expenses, the farmer was not obliged to sell his produce immediately he had need of money; he had thus the free disposal of his crop and could organize more successfully the joint manipulation and sale of his produce as well as the joint purchase of his requisites.

2. *Characteristics of the Co-operative Societies for Purchase, for Sale, and for Production and of the Auxiliary Co-operative Societies.* — The organization of the purchase of implements and other agricultural requisites was easier and more rapidly carried out than the organization of the sale of produce. All the co-operative stores which, originally, were intended to deal particularly with the sale of agricultural produce were, before the war, obliged to rely on their receipts from the joint purchase of agricultural requisites in general, if they wished to run the risk of selling grain wholesale and to cover their expenses. These societies have none the less attained a considerable success. By the fact that they supply their members with goods of high quality, they compelled the merchants to improve the quality of the chemical fertilizers. Here also the co-operative societies awakened the desire to intensify agricultural production and to organize business relations on a rational basis.

It was only a step for the co-operative societies to undertake the manipulation of agricultural produce (co-operative dairies, co-operative chicory-drying societies, co-operative distilleries, co-operative potato-flour societies, co-operative mills). Co-operation was afterwards extended

to the use of agricultural machinery and the production and supply of electricity.

Already agricultural districts could be mentioned where the farmer buys from his co-operative societies almost everything of which he has need in the working of his land and only sells the produce of his labour through their intermediary. From these districts the former dealers in agricultural produce and agricultural requisites have disappeared one after the other.

Between certain branches of co-operation, however, there is an appreciable difference. Generally speaking, the form which succeeds best is that of independent co-operative societies affiliated to a well-organized central federation, managed as a great undertaking on the most perfect modern commercial and technical lines. Local co-operative credit societies cannot now succeed without the assistance of a central bank. This interdependence is becoming more and more marked. It may be observed particularly in the receipts and expenditure of the Kampeličky societies. It may also be seen in the Czech or German credit societies. In 1898 out of every 100 crowns received by the Kampeličky societies, 14.50 crowns came from the Central Union of Agricultural Societies at Prague; in 1912, this average had risen to 37.1 crowns. Amongst the German co-operative societies in Bohemia the proportion of cash received from the Union rose from 20 crowns to 25 crowns per 100 crowns received by the Raiffeisen banks. As to the expenditure, the proportion rose from 20.9 crowns to 36.9 crowns for the German co-operative societies and from 23.2 crowns to 28.3 crowns per 100 crowns paid out by the Kampeličky societies. This development became considerably more rapid as a result of the conditions created by the war.

In the course of the war, the loans granted by the Raiffeisen banks were almost completely repaid, so that the financial business of these societies became more and more confined to accepting deposits and handing them over to the central bank to which the local bank was affiliated.

Amongst the other co-operative societies, only one kind endeavours to enter into business relations with a central co-operative organization. The co-operative supply societies have shown a strong tendency in this direction, especially in regard to the supply of agricultural requisites. These societies were formed, for the most part, as district societies; they always embrace, therefore, from 30 to 60 communes, grouped, as far as possible, so that the distance which separates the communes may be traversed in a day. Certain societies, notably the older ones, have recently established branches in various parts of their districts, so as to facilitate relations with their members. These societies also undertake, as a rule, the sale of agricultural produce, particularly of grain, and they now also undertake the supply of such necessities as textile goods, boots and shoes, etc. Their central business organization has greatly developed of late. The co-operative chicory-drying societies, the dairy societies, and the co-operative distilleries have also formed central business organizations on the same model. In certain branches centralization is excluded by the

very nature of the goods handled ; this is the case, for example, with the co-operative mills, which only work for their members, and with the societies for the joint use of agricultural machinery. In other cases centralization, though difficult, is not impossible ; this is notably so with the co-operative flax societies

3. *Farmers' Organizations for the Sale and Insurance of Live Stock* — Unlike what has occurred in some other countries, the joint sale and mutual insurance of live stock are not highly developed. The live stock trade and treatment of aimal produce are carried on by agricultural organizations, but on quite a different legal basis. However, this organization, which is based on the district co-operative breeding societies and is centralized in five agricultural societies for the sale of live stock, may be considered as a means of legitimate defence on the part of the farmers, pursuing the same ends as the co-operative societies for the sale of live stock in other countries which are more advanced from the co-operative point of view. The societies, the most important of which is the Czech Agricultural Society for the Sale of Live Stock with headquarters at Prague (*Ceská zemědělská společnost pro prodej dobytka v Praze*) are working very energetically to improve the breeds and to fill up the huge gaps left by the war in the live stock of the country. With this object, the societies have entered into relations with foreign countries such as Yugoslavia, France and Switzerland.

Mutual agricultural insurance societies are not very numerous in the Republic. The agricultural classes already had their own insurance societies and since 1870 had insured themselves with the Czech insurance companies or mutual societies. Although these insurance societies are not organized on co-operative lines, they answer by their work to the reasonable interests of agriculture, so that there was no serious reason for the formation of new insurance undertakings on a co-operative basis. It is interesting to note that the promoter of the co-operative insurance societies, Chleborad, was at the same time the founder of the largest Czech insurance society, Slavia.

Only in Bohemia was live stock insurance organized in the form of independent insurance societies, managed by the farmers themselves. With the help of the Central Union of Czech Agricultural Societies of Prague, the Czech Farmers' Association (*Sdružení českých zemělilců*) the Re-insurance Union of Czech Mutual Live Stock Insurance Societies with headquarters at Prague (*Zajišlovací svaz českých spolků pro vzájemné pojistování dobytka v Praze*) was founded in 1910. This union is a federation of local live stock insurance societies and re-insures 50 per cent. of their risks. Thanks to the support of the public authorities the Re-insurance Union is in a position to confer appreciable advantages on its members. The development of these insurance societies, which are independent and mutual, was very promising between 1910 and the outbreak of the war. Unfortunately the war has resulted in a diminution of their number. Under the new conditions, the Union will doubtless be able to restore within a short time its former prosperity to the whole organization.

The following table shows the development of the Czech live stock insurance societies.

Year	Number of societies	Number of members	Number of animals insured	Value	Amount of compensa- tion paid	Sale of carcasses	Net com- pensa- tion paid
				in thousands of Czech crowns			
1910	21	957	3,449	1,051	7	3	4
1911	162	7,659	30,262	9,000	186	63	101
1912	318	13,902	59,203	19,194	541	272	261
1913	420	20,790	76,480	27,223	607	325	282
1914	470	23,235	85,253	27,174	625	306	219
1915	454	22,151	75,679	37,828	519	319	230
1916	370	18,305	69,290	55,763	705	413	292
1917	311	15,414	32,571	41,635	1,071	598	173
1918	211	9,875	22,298	28,776	748	173	275

The Re-insurance Union has two sections, one for the insurance of cattle and the other for the insurance of horses. Their assets amounted to 750,000 crowns. Only in Bohemia, however, is this organization highly developed; in the other parts of the Republic it does not yet exist. Recently proposals have been made in the Czechoslovak National Assembly that live stock insurance should be taken over by the State.

4. *Co-operation in Sugar Refining, in Brewing and in Milling.* — There are two branches of agricultural production to which co-operation has not been applied — sugar refining and brewing. The sugar refineries in Czechoslovakia are share companies in the hands of capitalists. One can only speak of the collaboration of the farmers in the cases, which are by no means infrequent, where the farmer who supplies the beetroot, holds shares in the sugar refinery and is legally bound to deliver a minimum quantity of produce. Even in this case, if the directors of the undertaking and the majority of the shareholders are not agriculturists, one cannot speak of it as an agricultural undertaking. Only in Moravia have recently been built or purchased some sugar refineries in which the farmers who supply the beetroot hold the majority of the shares and to which they are, at the same time, bound to deliver their beetroot. Here again we are dealing with independent agricultural undertakings in the form of share companies and not of co-operative societies. The distribution of the profit is not proportionate to the quantity of beetroot supplied, but to the number of the shares held.

However, in sugar refining, the interests of the growers have been safeguarded by another method. A powerful national association of beetroot growers (*Československá jednota řepářů*) has been formed by the local

organizations and all the beetroots are sold to the sugar refineries through its intermediary. This association makes collective agreements for the delivery of beetroot and the purchase from the refineries of the pulp and the saturated lime. This organization for the sale of beetroot, to which almost all the growers belong, defends the interests of its members and had recourse in 1909 to a lock out, which resulted in the diminution by one-third of the area under beetroot in that year. Subsequently the organization was recognized by all the refineries. It must be added that most of the sugar-refining companies were formed twenty years before the co-operative societies began to undertake the manipulation of agricultural produce.

Brewing is one of the oldest of Czechoslovak industries. There are at present in Bohemia only two co-operative breweries, but the farmers have acquired a partial influence over the breweries, notably the medium-sized breweries, through their co-operative societies for the sale of grain (barley) in their capacity as wholesale suppliers of the raw material. At the same time the hop-growers have formed an association, which has made a great effort to protect the brands of hops (Zatec, Saaz, and Louny) and has founded at Prague its own selling organization under the title of the Society for the Sale of Hops. In Moravia there are some well organized co-operative malt-houses, which export their produce to all parts of the world.

Co-operation necessarily became much more important in milling. Originally the farmers had no intention of forming co-operative mills. The majority of the millers gave satisfaction to their farmer clients. It was only in 1910 that one began to hear more frequent complaints on the part of the farmers in various districts. Besides, a fair number of small mills suffer from the competition of the large mills in Hungary. More and more co-operative mills are being formed, but the majority of these confine themselves to grinding corn for the farmers and do not sell the flour; these are called "country mills." The war has greatly favoured their development; the agricultural co-operative societies buy many private mills or erect new co-operative mills.

Fully to realize the direction in which agricultural co-operative societies are tending to develop, it is important to note that at Prostějov, in Moravia, a joint organization has been formed by the co-operative supply society, the co-operative mill and the local working men's co-operative distributive society. It is possible that out of this combination between agricultural co-operation and distributive co-operation, a new method of food supply may be evolved.

(To be continued).

UNION OF SOUTH AFRICA.

AGRICULTURAL CO-OPERATION IN 1920.

SOURCE (OFFICIAL):

REPORT OF THE LAND AND AGRICULTURAL BANK OF SOUTH AFRICA FOR THE YEAR ENDED
31 DECEMBER 1920. Cape Town, 1921.

The Land and Agricultural Bank of South Africa finances agricultural co-operative societies in South Africa to a very great extent, and the Reports of the Bank contain a large amount of information regarding their working. It should be noted, however, that the bank is only empowered to lend to co-operative societies in which the liability of the members is unlimited, and that a number of societies on a limited liability basis has been formed in recent years, notably in Cape Province and in Natal.

§ 1. THE FINANCING OF CO-OPERATIVE SOCIETIES BY THE LAND BANK.

Co-operative societies obtain loans from the Land and Agricultural Bank to provide working capital, which is required principally to make advances to members against produce at the time of delivery and to a lesser degree to purchase farming requisites to be supplied to members. As the produce is realized the amount borrowed is temporarily repaid to the Bank, but is held available to societies for the following harvest. Therefore the calls on the Bank in respect of the cash credits coincide with the time that members are delivering produce to societies, and as only one crop (maize) is handled in any considerable quantity, practically all the calls on the Bank for loans of this kind are concentrated into those three or four months, from July onwards in each year, during which maize is being delivered. The Report for 1920 states that during that year the Bank was not able to finance societies to the extent of their requirements, and as a matter of fact it could not have financed societies to the extent it did had it not raised a short date loan of £250,000, thereby anticipating legislation which it is hoped the Minister of Finance will introduce during the next session of Parliament to give the Central Board wider borrowing powers. The Report also states that the co-operative movement has grown to such an extent that a stage has been reached when it is necessary to state in plain terms that if Parliament expects the Land Bank to finance societies in the manner contemplated by the Land Bank Act, then Parliament must see to it that the necessary amount of capital is provided.

During the year societies handling produce withdrew £825,300, and repaid £218,800 under the cash credits. The maximum debit balance was £918,460 and the minimum was £213,680. Interest is calculated on the daily balance of the amount owing and is payable at the end of June and December each year.

Instalment loans present no difficulties such have been outlined in connection with the cash credit accounts. Capital is borrowed in this way to cover the cost of fixed property, buildings, plant and other unproductive expenditure of that nature. Payment is usually made to the society in one sum, and the loan is repayable in instalments spread over a maximum period of ten years. Some of the older societies have repaid their loans in full, whilst in other case the debt has been substantially reduced, and societies are in this way accumulating capital.

The Report states that an advance of £10,000 was made through the Bank to the South African Industrial Federation Co-operative Development Coy., Ltd., on 6 August 1918, out of a special vote by Parliament — the Bank's funds were not involved — as a war measure to assist in reducing the cost of living. The Company paid interest at 5 per cent. for the year ended 6 August 1919, and the capital amount was written off on Treasury authority on 25 August 1920.

§ 2. MAIZE SELLING SOCIETIES.

In the Transvaal and Orange Free State, the district maize-selling societies receive and grade the maize delivered by individual members and thereafter pay out an advance to them, but the sale of the maize is performed by a "central agency" at Johannesburg, to which all the Transvaal and some of the Free State maize societies are affiliated. A separate "central agency" has recently been established in the Free State for the remaining maize societies in that province and that agency works to a limited extent in co-operation with the Transvaal central agency. Experience has shown that it is desirable that there should be one selling agency only.

The representatives of all the maize societies met on 16 June 1920 at Johannesburg for the purpose of fixing the advance to be paid by societies to members against their crop. They had these figures before them :—

(a) That the Johannesburg Municipality had just entered into a twelve months' contract at 26s. 6d. per bag ;

(b) that the mines were prepared to pay about 23s. 6d. for their large requirements ;

(c) that export to Australia would give about 23 . net ;

(d) that export to England would give 20s. ; and

(e) that continental values were probably higher than those of either England or Australia.

In view of these figures a maximum advance of 18s. per bag was decided upon.

The Board did not approve that advance, for the reason that it should not, in the Board's opinion, be fixed on the basis of market values which might prevail throughout the harvest year, but on the basis of cost of production. The Report states that the societies argue that the "advance" must be approximately the same as the price at which speculators are prepared to buy at the time members are delivering their maize to the societies and that an advance based on the cost of production would impose too great a strain on members' loyalty to their society and that a large number of them would be unable to resist the temptation to sell outside their societies. The Report states that the Board are bound to admit the force of that argument, supported as it is by the experience gained in practical working of co-operative societies in Central Europe. It is added that the Bank's views were influenced by the practice of supplying members with farming requisites on credit. The Board aimed at obtaining a substantial margin between the advance and the ultimate realized value in order to secure payment for the farming requisites supplied to members during the year. As, however, all those societies recently established confine their supply business to grain bags and wool packs and as credit trading in the case of the older societies has been restricted, one of the strong arguments in favour of a substantial margin has lost force. But directors should, as cautious business men, regard anticipated values somewhat pessimistically. The Report states that unfortunately the figures considered by the meeting in June, coupled with the official statement that the crop had been a comparative failure, led societies' representatives to view anticipated values in too optimistic a light, and it seems likely that in a number of cases the amount advanced will not be realized and members will be called upon to repay part of the amount advanced, which must adversely affect the co-operative movement.

The maximum advance of 18s. per bag was not adopted by all the societies. Thus in the Transvaal, one society advanced 10s., another 12s. 6d., another 16s., another 17s. 6d., and the remaining seven 18s. a bag. In the Free State, one society advanced 12s. 6d., five others 15s., and the remaining seven 18s. a bag. Most of the societies reduced the advance as the season progressed and market values dropped.

In Natal there has been no co-operative development amongst the maize growers. Only one maize-selling society, that of Ennersdale, is financed by the Bank, but it does not carry on operations on the same lines as those societies established in the Transvaal and Free States; it merely acts as broker for the member, who himself stores the maize. The system is simple but is probably unsuitable for the small man, who is forced to realize immediately upon reaping when market values usually are low.

The Report also deals with various charges which have been levelled at the co-operative societies. It states that the opposition comes mainly from the "produce dealer," which is merely another name for the speculator. It refutes the charges of hoarding and profiteering and notes that whilst oversea maize values give about 12s. a bag (from which must be deducted the 2s. the grower paid for the empty bag) the shipping companies

receive 8s. a bag for transporting the maize from Union ports to Europe as against 1s. before the war.

In July 1920, when export was virtually prohibited, oversea values were equal 23s. a bag at sending stations. In November when restrictions on export were withdrawn, oversea values dropped to 12s. a bag for white and 10s. 6d. for yellow mealies.

It is understood that the Department of Agriculture is making full enquiry into the question of the cost of maize production and it is confidently anticipated that the enquiry will show that it does not pay to grow maize at the prices farmers were offered at the end of the year.

§ 3. OTHER KINDS OF CO-OPERATIVE SOCIETIES.

Co-operative Dairy Livestock Societies. — These societies continue to flourish and the Board is satisfied that they are sound propositions if properly conducted.

Co-operative Cheese-making Societies. — Of the three societies of this class conducted in the Free State, all have been unsuccessful. The Excelsior was liquidated in 1919, another at Kestell has been placed in liquidation, and the third at Hobhouse has suspended active business.

• § 4. STATISTICS OF CO-OPERATIVE SOCIETIES.

The turnover of co-operative societies during the last three years is given in the following table.

TABLE I. — *Turnover of Co-operative Societies in 1918, 1919 and 1920*

	1918	1919	1920
	£	£	£
Produce . . .	698,395	816,621	887,400
Farming requisites (including grain bags)	169,895	164,472	314,810
Total	868,290	981,093	1,202,210

Table II (pages 332 and 333) gives some statistics relating to societies for the sale of produce and purchase of farming requisites. The majority of these societies deal in maize.

§ 5. CO-OPERATIVE LEGISLATION.

With regard to co-operative legislation, the Report states that the position is rather unsatisfactory. There are special laws in force in the Transvaal and Free State providing for the formation, registration and management of co-operative agricultural societies, with unlimited liability, but there are no corresponding laws in the Cape and Natal provinces. The requirements of agricultural co-operators, with unlimited liability, in those two provinces were partially met by an amendment to the Land Bank Act in 1916, but that was admittedly temporary legislation.

There is, however, no special legislation in any of the provinces to meet the requirements of co-operators on a limited liability basis. At present companies of that kind are registered under the ordinary joint stock company laws, which do not entirely meet their requirements.

There remains a third group of co-operators, namely consumers, who form trading co-operative companies, for whom legislation is also required.

There is no doubt that co-operative development has entirely outgrown co-operative legislation, and it seems desirable that a comprehensive co-operative bill should be introduced as early as possible.

§ 6. THE QUESTION OF STATE AID TO CO-OPERATION.

The Report states that criticism is from time to time directed against the policy of the State granting, through the Bank, substantial financial assistance to co-operative societies. The Board expresses the opinion that State aid to agricultural co-operation is justifiable, provided it aims at (a) stimulating production, and (b) enabling members of the societies to get the best possible price for their own produce.

Apart altogether from the question of granting financial assistance, the Board thinks that a stage has been reached in co-operative development in South Africa when the State might with advantage retire from its somewhat too intimate association with co-operation. That intimacy rose out of the State's active efforts to popularize co-operation (which at the time was something novel) amongst the farming community. The State has actively participated in the movement for more than ten years and during that period co-operative societies have been formed for a variety of purposes and are practical examples of the application of co-operative principles. Co-operators have a wealth of experience to draw upon and to guide them, and it is thought that they should themselves now take up the work of preaching and spreading co-operation.

TABLE II. *Societies for the Sale of Produce and the Purchase of Farming Requisites.*

	Number of members	Advances from Land Bank		Sales in 1920			Profit (or loss) on year's working
		Granted	Outstanding on 31 Dec. 1920 (Exclusive of interest)	Produce	Farming requisites	Total	
<i>Transvaal Societies :</i>							
De Central Westelike Ko-operatiewe Landbouw Vereniging	730	100,000	87,812	165,800	46,800	212,600	1,303
Krunko Ko-operatiewe Vereniging	200	30,750	27,750	27,750	11,700	39,450	621
Heidelberg Ko-operatiewe Landbouw Vereniging	155	30,000	8,821	3,420	8,150	11,570	941
Hoogeveld Ek-dracht Boeren Ko-operatiewe Vereniging	197	39,000	34,712	13,440	14,700	28,140	— 1,869
Koster Ko-operatiewe Landbouw Vereniging	325	34,000	32,750	30,200	10,700	40,900	1,493
Lichtenburg Ko-operatiewe Landbouw Vereniging	1,215	84,125	67,625	152,500	64,300	216,800	146
Lijdenburg Ko-operatiewe Landbouw Vereniging	391	3,500	3,500	45,000	7,000	52,000	2,262
Magaliesberg Ko-operatiewe Tabakplanters Vereniging (1)	3,018	30,000	—	146,950	—	146,950	8,475
Marico Boeren Ko-operatiewe Vereniging	155	5,000	2,785	8,000	1,500	9,500	— 142
Middleburg Landbouwers Ko-operatiewe Vereniging	535	48,875	44,875	22,000	21,300	43,300	— 421
Rustenberg Boeren Ko-operatiewe Vereniging (2)	792	40,062	26,250	31,500	8,400	39,900	383

Bethlehem Ko-operatieve Landbouw Vereniging (3)	199	37,000	33,500	24,900	15,600	40,500	43
Clocolan Ko-operatieve Landbouw Vereniging.	92	27,000	21,287	—	—	—	—
Dewetsdorp Ko-operatieve Landbouw Vereniging	113	19,500	2,500	—	—	—	—
Excelsior Ko-operatieve Landbouw Vereniging	45	19,500	9,470	—	—	—	—
Ficksburg Ko-operatieve Boere Vereniging	141	48,000	31,000	—	—	—	—
Frankfort Ko-operatieve Landbouw Vereniging	383	99,625	83,625	33,000	16,400	49,400	459
Hielbron Boeren Ko-operatieve Vereniging.	109	75,000	46,500	—	—	—	—
Hobhouse Ko-operatieve Zuivel Vereniging (4)	46	—	1,125	—	—	—	—
Ladybrand Ko-operatieve Landbouw Vereniging	133	53,000	31,500	—	—	—	—
Lindley Boeren Ko-operatieve Vereniging	252	86,687	70,687	26,800	8,700	35,500	359
Reitz Ko-operatieve Landbouw Vereniging.	382	79,000	79,000	11,750	120	11,870	305
Senekal Ko-operatieve Landbouw Vereniging	317	55,304	55,304	22,850	2,400	25,250	275
Verde Ko-operatieve Landbouw Vereniging	497	42,750	42,750	700	9,600	10,300	4,004
Wepener Ko-operatieve Landbouw Vereniging	149	19,300	19,300	27,000	13,000	40,000	620
<i>Natal Societies :</i>							
Ennensdale Farmers' Co-operative Society	41	5,315	4,091	—	—	11,890	9
<i>Cape Societies :</i>							
East London Dairy and Farm Products Co-operative Society	27	1,604	1,604	11,720	—	11,720	1,103

(1) Sale of leaf tobacco. — (2) Chiefly cotton. — (3) Farming requisites, grain bags and wool packs. — (4) Sale of cheese.

Part II: Insurance and Thrift

UNITED STATES.

INSURANCE OF FARM CROPS AGAINST HAIL, (*Continued*).

SOURCE (OFFICIAL):

VALGREN (V. N.): Hail Insurance on Farm Crops in the United States. United States Department of Agriculture. Bulletin No. 912. Washington, 1920.

§ 8 THE HAIL INSURANCE CONTRACT.

Hail insurance is written on growing crops which represent goods in prospect rather than goods in existence. It covers the period of development of crops. The term for which the insurance is in force is usually the period between the day following the date of application for insurance and the date of harvest. No difference in the premium charges is made, as a rule, either because of the lateness of the date at which the insurance takes effect or the early maturity and consequent early harvesting of the crop. One risk may remain insured twice as long as another without affecting the premium charges for such insurance.

All the joint-stock companies, so far as is known, limit themselves to a policy covering a specific crop growing on a designated piece of ground. The same is generally true of the mutuals operating west and south of Minnesota and Iowa. In the States just named, as well as in the States farther to the east, a number of the mutual companies write a policy for either three or five years and cover certain enumerated crops on a given farm. One very successful mutual company writes a perpetual policy, the insurance contract remaining in force until cancelled by the insured or by the company.

The disregard of the time element in the typical hail policy is explained, in part at least by the nature of the objects insured. Even though hailstorms may be no more frequent or severe in the latter part of the season, the probability of loss in the case of most crops increases rapidly as the time of harvest approaches. During the early stages of the growing crop, a hailstorm may cause a set-back merely, without materially affecting the final yield. As the crop develops, however, the possibility of such recovery becomes more and more remote and eventually disappears. A hailstorm occurring at the time when the crop is ready for harvest means not only that the damage wrought is irreparable, but a larger percentage of the stems

of grain are actually broken than would have been the case at an earlier stage. The heads on broken stems drop to the ground, while the heads on unbroken stems may have lost a part of their contents.

In the case of hail insurance, unlike fire insurance, the hazard insured against originates entirely in natural forces over which man has no control. Elaborate provisions against the so-called moral hazard have, therefore, no place in the hail insurance contract. An individual whose crop is insured may, however, under certain circumstances increase the apparent loss due to hail by failure properly to care for a damaged crop after hail has occurred. There is also the possibility that the description of the acreage covered may be so inaccurate or misleading as to apply equally well to more than one piece of land, or that the insured may make misstatements in regard to the insured crop or the damage suffered thereon. These aspects of the moral hazard are, therefore, guarded against in the hail policy.

Slight consideration has been given, as a rule, to the question of over-insurance. A maximum has almost invariably been fixed by each company on the amount written per acre, but little notice was taken until recently of concurrent insurance purchased from other companies. Instances have occurred in which individuals have taken out insurance in several different companies on the same crop, making the total of such insurance greatly in excess of the value of any possible harvest from the acreage in question. Unless the locality in question happens to be peculiarly susceptible to hail and the premiums have not been adjusted to meet such conditions, the gambler in hail insurance has the chances heavily against him. Occasionally, however, individuals operating on this plan have made winnings, especially before co-operation in the adjustment of losses came into practice among many of the large writers of insurance.

The maximum amount of hail insurance per acre written by the individual company has been increased in recent years in response to the higher value of farm crops. While formerly \$8 or \$10 were common limits, nearly all companies operating in the Middle West, where the bulk of the hail insurance is carried, now write a maximum amount of \$12 per acre on cereal crops grown on unirrigated land and \$25 per acre on cereal crops grown on irrigated land. In some of the Eastern States \$20 per acre is written on cereal crops by individual companies even though such crops are grown by the ordinary method. In the case of cotton, such maximum usually ranges from \$20 to \$30 per acre, and in the case of tobacco and other crops requiring a considerable amount of hand labour, it reaches \$100 or more per acre. Relatively little hail insurance has hitherto been written on market garden or orchard crops and no fixed standards as to amounts per acre, or in many States even as to rates, appear to have been agreed upon by the companies.

Most companies now prescribe a limit of \$40 per acre for concurrent insurance, including the amount carried by the company in question, in the case of non-irrigated cereal crops and of \$75 per acre for cereal crops on irrigated land. Should the total concurrent insurance exceed these lim-

its, each company will be liable only for its pro rata part of the maximum amount of insurance permitted.

For adjustment purposes the crop is valued at the amount of insurance carried per acre. If there is total loss, the indemnity due is the amount of insurance carried per acre, while in case of a partial loss the indemnity due is such part of the insurance per acre as the part of the crop lost by hail is of the undamaged crop before the hailstorm occurred. Suppose, for example, that a farmer has insured his crop to the amount of \$12 per acre and that a hailstorm occurs and damages it. The percentage of the crop lost by reason of hail is ascertained. If it is equal to 50 per cent, or one half of the crop, the insured is awarded indemnity equal to one half of the insurance carried, or \$6 per acre. If it is found that three fourths of the crop has been lost by hail the indemnity is \$9 per acre. This holds true independently of the actual value of the crop, provided it was not so damaged from any other cause as to preclude a profit over and above the actual cost of harvesting, gathering, threshing and marketing. Should it happen, for instance, that one farmer whose field is insured at \$12 per acre had in prospect a yield valued at \$60 per acre while the field of his neighbour, similarly insured, promised a yield equal to only \$6 per acre, and a hailstorm passed over the two fields, causing a 50 per cent. damage, each farmer would receive \$6 per acre, or one half of the amount of insurance carried. One of the farmers would, of course, be paid only one fifth of the actual loss suffered, or one tenth of the value of the undamaged crop, while the other would receive twice the amount of his actual loss, or a sum equal to the entire undamaged value of his crop.

These practices violate the principle that no profit to the insured is contemplated or permitted. On the other hand, to limit the indemnity on the basis of the reduced value of the crop preceding the occurrence of hail would give the company an unfair advantage unless provision were also made for the return of a part of the premium corresponding to the reduced liability. Such a provision would, in practice, involve considerable difficulty, and the necessary adjustments, assuming that the plan were otherwise practicable, would add materially to the expense of operation.

Unless there is some provision for the return of a part of the premium, there is no reason why the company should have its indemnity payments reduced on the ground that adverse conditions, other than the occurrence of hail, have reduced the value of the insured crop. The premium rates are fixed on the prevalence of hail in a given locality coupled with the susceptibility of the insured crop to damage from this hazard, and not on the basis of any probability of earlier loss from other causes. From this point of view it would seem that even the provision in the hail contract which denies liability in cases of earlier damage, from causes other than hail, to such an extent that the crop is not worth harvesting, should be coupled with a provision for the return of an appropriate portion of the premium in cases where the company uses its right to deny liability under this provision.

Where mutual hail insurance companies write a term policy covering specified crops on a given farm, the amount of insurance per acre will nat-

usually vary with the total acreage of crops which are enumerated in the policy. It is ascertained by dividing the total amount of insurance on the face of the policy by the number of acres planted to the kinds of crops which are covered by the insurance contract. The adjustment of losses is usually made in the same manner as is in vogue with companies writing seasonal policies, but in some cases the companies pay the actual estimated loss on each acre up to the amount of the insurance carried.

Whatever the nature of the hail policy, no liability is assumed for a loss which does not equal 5 per cent. or more of the insurance on a given crop. The payment of a partial loss does not terminate the policy, but reduces the liability of the company by the amount paid on such loss.

§ 9. SPECIAL PROBLEMS IN HAIL INSURANCE.

The writing of seasonal policies results in business being particularly active at certain times of the year. Hail insurance is rarely purchased on this plan until after the crop is already growing and giving promise of a fair harvest. Competent solicitors must be employed during the relatively busy summer months, while the company has no employment for them after the hail-writing season ends, except to the extent that the same men are also used as adjusters. The adjustment work, however, begins shortly after the hail-writing season opens and continues but a few weeks at most after the acquisition of business has ceased. Most of the office work, too, is coincident with the writing of insurance and the adjustment of losses.

This seasonal nature of the business complicates the problems of administration and adds to the expenses of operation. Under such conditions, it is difficult, if not impossible, to attract efficient workers without the offer of special inducements.

Even in the case of most mutual insurance companies writing term policies the risks in force during a given season rest to a considerable degree on policies written after the fields were giving substantial promise of harvest.

There is, of course, considerable economy if the term policies actually remain in force for the term contemplated. A few mutual companies have succeeded in making their membership practically continuous, and in such cases the expenses are strikingly small and the total saving to the members has been correspondingly great.

A particularly difficult problem in the administration of a hail insurance company is that of the erratic nature of the hail hazard, and the resulting wide variation in the losses experienced. In 1914, for example, the total hail premiums collected by all classes of insurance institutions in the United States were approximately \$5,558,000 and the losses were only \$2,677,000 or 48 per cent of the premiums. The following year, 1915, the total hail premiums received amounted to about \$9,752,000, while the losses incurred were \$11,833,000 or over 121 per cent. of the premiums collected. The summer of 1916 was again a season of severe losses for the hail insurance companies as well as for farmers who carried their own risks. The years

1917 and 1919 were both years of relatively small hail losses for the United States as a whole, while 1918 was approximately an average year. During the six years above mentioned the percentages of total hail premiums paid out for losses by all classes of insurance institutions were: 1914, 48.2 per cent.; 1915, 121.3 per cent.; 1916, 87.3 per cent.; 1917, 50.7 per cent.; 1918, 63.7 per cent.; 1919, 47.8 per cent.

With such variations occurring when the experience of all institutions operating in a large number of different States is taken into account, it will be apparent that the loss ratio to be expected in any given year is highly problematical when the figures for a single company, charging a fixed premium rate and operating in a severe hail district, are considered. More particularly is this the case when such company limits its operations to a relatively restricted area.

The joint-stock insurance companies rarely have an expense ratio much below 35 per cent. of the premium income. Assuming that on an average 35 per cent. of the premiums is required to cover expenses, the companies, as a group, have lost money during each year in which the actual losses have exceeded 65 per cent. of the premiums, and have made a profit during each year in which the loss ratio has fallen below this figure.

The variation in the destructiveness of hail in a given State depends to some extent upon the degree to which the land is given over to one or two commercial crops. Thus, Kansas and Oklahoma, for example, with their large winter-wheat acreage, North Dakota and Montana with their large spring-wheat acreage, or parts of Texas with their cotton acreage, are likely to be subject to especially great variations. One or more bad hailstorms occurring at a critical period in the development of the main crop in these States may ruin a relatively large percentage of the total crops. Equally severe hailstorms occurring either before or after the critical period will cause far less damage. The variation in the losses experienced by insurance companies in States where a single crop predominates is further heightened by the fact that this crop is very generally insured by the farmer without including his other field acreage, thus causing the hail risks carried by the insurance companies to be still more concentrated in a single crop.

In States in which there is considerable diversity of crops, this high degree of susceptibility to damage from hail will not occur. In such States farmers usually insure more than one crop. The critical period of one or more of these crops is likely to be past before that of other crops is reached. The hail losses in these States will, therefore, vary somewhat less from year to year.

No insurance company can with safety assume a large volume of hail risks in a limited territory unless it has available assets in considerable amount. A new company, obliged to rely for the meeting of its obligations largely or entirely upon the premiums collected during the year, should see that the risks assumed are scattered over as wide a territory as circumstances permit. A limit should be placed on the acreage that may be ac-

cepted for insurance in any one square mile of area, in any one township, and, finally, in any one county.

The mutual insurance company as well as the newly organized or small joint-stock company doing a hail insurance business must use every reasonable opportunity to build up a surplus or reserve fund. In the case of mutual companies, those members who join the company in the year when the hail hazard happens to be unusually light must be willing to be assessed an amount considerably greater than that required to pay the loss for that year and to leave a part of the funds which they have contributed in the reserve fund of the company to be used to supplement the premiums collected in years when the hail hazard happens to be exceptionally severe. Unless a mutual company follows this plan it will be obliged to prorate its losses in years of heavy hail damage.

There is no serious objection to the plan of prorating losses by a mutual company, provided all the members have joined with the understanding that such action may be expected in case the contributions to the company prove insufficient to meet the losses incurred together with legitimate expenses of operation. It has, however, been the general experience of mutual hail insurance companies that whenever it has been necessary to prorate losses, the membership in the years following such action has materially decreased. The management of the company is almost invariably blamed for the failure to settle in full, regardless of the facts of the case. Many companies have failed to survive the prorating of losses even where such companies were managed by men whose integrity was unquestioned among those who knew them personally.

Another problem of hail insurance may be pointed out with particular reference to mutual companies. Democratic management and control of the company are difficult, owing to the fact that a mutual hail insurance company cannot be operated successfully in a territory of small area. A possible exception to this rule may be found in the case of certain districts where the hail hazard is relatively light and the insurance covers only one or two specified crops forming a minor part of the acreage of each farm. Most such companies, however, operate in an entire State, or perhaps in several States, and it is not possible for the average member directly to participate in the management. Hence the control must of necessity be left to a relatively small group of men. As a rule, the directors all live in the same locality, while the average member takes no part either in the annual election or in the decisions of other problems of management.

Yet another problem is the difficulty of determining the loss caused to a growing crop by hail. Frequently hail will occur before the crop has reached a stage at which its occurrence will result in permanent or material damage. At certain stages the entire crop above ground may be entirely beaten down and the farmer claim a total loss, when as a matter of fact, with favourable weather conditions following the hailstorm, a partial or even a complete recovery of the crop may take place.

In other instances, the crops may have been partially damaged by certain plant diseases or insect pests before the hail occurred. Only an expert

on these matters may be able to determine whether or not the damage pointed out by the claimant is directly due to the occurrence of hail or to the other natural agencies mentioned. When a difference arising between the company and the claimant for loss involves the extent to which a damaged crop will recover, the adjustment may be postponed until harvest, by which time nature will in part have answered the question in dispute. When the difference, on the other hand, hinges upon the cause of the damage rather than the extent thereof, postponement of the settlement is likely to increase the difficulty rather than to remove it.

Fair and reasonable adjustments, as well as economy in the operation of the business are, in the long run, as much in the interest of the buyers of hail insurance as they are in the interest of the organizations engaged in this business.

Extravagance, either in the adjustment of losses or in the expenses of operation, is quite sure to be reflected in increased premium rates or assessments. Adequate rates of premiums or assessments are a first essential to true success, but excessive rates, whether caused by extravagance or cupidity, tend to discourage the buying of insurance on the part of many of those who need it, to reduce the volume of business and lessen the usefulness of the insurance institutions and to place an unfair and unjustifiable burden upon those who do provide themselves with needed protection.

MISCELLANEOUS INFORMATION RELATING TO INSURANCE AND THRIFT.

FRANCE.

1. CLIMATOLOGY AND INSURANCE AGAINST HAIL. — COMPTES RENDUS DES SÉANCES DE L'ACADÉMIE D'AGRICULTURE DE FRANCE. Meeting of 4 May 1921.

M. Jean Mascart, Director of the Observatory at Lyons, has recently shown in a communication to the *Académie d'Agriculture de France*, that mutual insurance against hail is rendered possible by the study of climatology; and further, that no sound solution can be found otherwise than by the application of the science of meteorology.

M. Mascart takes a hypothetical case of a strictly mutual insurance society each member paying in proportion to the frequency of the risks and to the assured value. Mutuality here consists in each member setting aside each year for his premium a sum corresponding to the amount of risk: the society fixes the amount of this sum, this insurance premium which it receives and administers; its function is to enable the individual to bear repeated losses. The solution of this problem is possible whenever the necessary data from which to fix the correct premium are available.

In the Department of the Rhône statistics of the damage reported have been kept for a century; it amounted to 257,663,313 francs. The average annual amount of damage actually done cannot be deduced from this figure, because the reports furnished were comparatively few during the early years and are always incomplete; discouraged by the slowness and inadequacy of the relief furnished, many farmers have ceased to declare the damage done. As the same source of error exists in each commune, M. Mascart, taking the Commune of Lucenay, in which the reported loss during the hundred years is 1,479,905 francs, considers that the coefficient of the commune, viz., $\frac{1,476,905}{275,663,313}$, or 0.005369, almost exactly represents the proportion of the total losses in the department which may be expected in the commune.

The same calculation was made for each commune, but the coefficients vary very greatly according to the value of the crops cultivated and the frequency of hailstorms.

In order to arrive at the average damage occasioned in Lucenay, M. Mascart calculated for the whole department the average for the recent period of ten years in which the largest number of declarations was made. This average was 5,972,176 francs. The average damage per year for the Commune of Lucenay was therefore, $5,972,176 \text{ francs} \times 0.005369 = 32,065 \text{ francs}$, which represents the total premium to be paid by the commune.

If all the land in the commune was precisely the same, it would only be necessary to divide the total premium by the number of hectares, in order to obtain the premium per hectare. But in reality this is not so. M. Mascart takes, as the basis for his calculations, the average value of the crop yield. Thus, knowing the distribution of the land in each commune in the different classes, with their average yields, a simple calculation of proportions will give the premium on each class. If the average annual damage in a commune is divided by the average value of the crop yield of that commune, the result gives the average annual damage per 1 franc of yield. There is a characteristic number for each commune; for Lucenay it is 0.0894 francs, and the premium per hectare for that commune is found by multiplying the average yield per hectare by 0.0894 francs.

Although very interesting from a theoretical point of view, the mutual insurance system expounded by M. Mascart presents two difficulties, well recognized by the author himself.

(1) This method of insurance is only applicable where the indispensable scientific basis exists, and where it is possible to group together solely regions having the same characteristics, or effect reinsurance in common with such regions.

(2) Also it assumes that all the land to which it applies is insured, in other words that insurance is compulsory, and it does not seem likely that insurance against hail will be made compulsory in France in the near future.

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2 HAIL INSURANCE IN 1920 — *L'Argus*, Paris, 1 May, 1921

There are three classes of society in France which write insurance against hail: limited liability companies, large mutual insurance societies, and 28 local mutual insurance societies subsidized by the Ministry of Agriculture.

Setting aside these last, which are still of small importance and of which particulars for 1920 are not yet available, the results of the year 1920 compared with those of the previous year are as follow.

	1919	1920
Number of policies.	209,727	215,720
Values assured	1,755,963,510 fr.	2,869,436,728 fr.
Premiums and contributions	25,967,657 »	42,083,563
Losses and expenses of settlement	12,002,934)	26,066,036)
Profits	7,005,146)	5,985,767)
Reserve funds	24,742,866)	28,779,073)

The proportion of the losses to the premiums and contributions was 62 per cent. in 1920; it was only 46 per cent in 1919

It may be added that the mutual societies do, in the aggregate, a larger business than the companies. Thus the policies issued by the companies numbered 106,724, while those issued by the mutual societies numbered 109,996, and the risks covered by the mutual societies amounted to 1,619,024,289 francs, as compared with risks amounting to 1,250,412,434 francs covered by the companies.

ITALY

- 1 AMENDMENTS TO THE LAW ON COMPULSORY INSURANCE AGAINST ACCIDENTS IN AGRICULTURE — LEGGE 24 MARZO 1921, N 297, CHE RECA MODIFICAZIONE AL DECRETO-LEGGE LUOGOTENENZIALE 23 AGOSTO 1917, N 1450, CONCERNENTE L'ASSICURAZIONE OBBLIGATORIA CONTRO GLI INFORTUNI SUL LAVORO IN AGRICOLTURA, *Gazzetta Ufficiale del Regno d'Italia*, No 77 Romc, 1 April 1921 — Circular No 13, dated 2 April 1921, of the Minister of Labour and Social Thrift regarding the amendments.

By the Law of 24 March 1921, No. 297, some amendments were made to the Decree-Law of 23 August 1917, No. 1450, relating to compulsory insurance against accidents in agricultural work, the main provisions of which we outlined in our issue of March 1919. The most important changes are those which relate to the scale of compensation to be paid for accidents. The scale fixed by the Decree of 23 August 1917, which is now considered inadequate in view of the present cost of living to rural workers, was as follows:

(a) In case of complete permanent disablement, from 1,200 liras to 3,250 liras, with the addition of one tenth for the wife and for each

child under 15 years old up to five tenths, that is with a maximum of 4,875 liras;

(b) In case of death, from 400 liras to 2,500 liras, with similar additions, that is with a maximum of 3,750 liras;

(c) In case of temporary disablement, from 50 centesimi to 1 lira per day, beginning on the eleventh day of disablement and continuing for 90 days.

In the new scale the compensation in case of death and of permanent disablement has been trebled, so that, taking account of the addition of tenths in respect of the wife and children, they vary between the following limits:

(a) In case of complete permanent inability, from 3,600 liras to 14,625 liras.

(b) In case of death, from 1,500 liras to 11,250 liras.

The compensation for accidents which produce temporary disablement have also been trebled, except for workers between 15 and 65 years, in the case of whom it has been quadrupled, that is, it has been increased from 1 lira to 4 liras for men and from 75 centesimi to 3 liras for women.

Further, while under the Decree of 23 August 1917 it was necessary to show a diminution of more than 15 per cent. in the capacity for work in order to be entitled to compensation for partial disablement, according to the recent provisions it is only necessary to show a diminution of 10 per cent. Again the limit of average daily earnings above which it is not compulsory for foremen on farms or in forestry undertakings to be insured against accident has been raised from 10 liras to 20 liras.

Compensation will be paid according to the new scale in respect of accidents which occur on or after the thirtieth day from the publication of the law, that is, 1 May 1921.

* *

2. COMPULSORY INSURANCE AGAINST ACCIDENTS IN AGRICULTURE IN THE FIRST HALF-YEAR OF 1920 — *Rassegna della Previdenza Sociale*, No. 9. Rome, September 1920

We have indicated above the amendments recently made to the Decree-Law of 23 August 1917, No. 1,450, on compulsory insurance against accidents in agriculture. We will here set out briefly the results attained in this form of insurance in the first half-year of 1920. As the reader is aware, this branch of insurance is entrusted, in the main, to the *Cassa Nazionale di Assicurazione per gli Infortuni sul Lavoro* (1) which carries it on by means of divisional offices (branches and agencies) spread over the whole of the kingdom.

In the period in question, 18,699 accidents were reported, of which 2,394 were reported in January; 2,763 in February; 3,221 in March;

(1) On the working and functions of this public institution, the official body entrusted with insurance against accidents in labour, see the article in our issue of June-July 1919

2,462 in April ; 3,245 in May, and 4,614 in June. As the winter slackness in agricultural work passes into the harvest activity of the summer months, the number of accidents increases. The only exception to the steady increase in the number of accidents was in April, in which month serious agricultural strikes occurred. It may even be affirmed that one of the most striking indications of the seriousness of the strikes in the various regions is furnished precisely by their effect in reducing the number of accidents. In June the strikes were particularly widespread and of long duration in the province of Parma so that in the division (*compartimento*) of Reggio Emilia, which includes that province, there were fewer accidents in June than in May, whereas in almost all the other divisions the number of accidents was about 50 per cent. higher.

The second year of the application of the Law began in May 1920. The accidents reported in the two first months of the two working years were as follow : 1919 : May, 902 ; June, 3,214, total, 4,116. 1920 : May, 3,245 ; June 4,614 ; total, 7,859. Even setting aside May 1919, when the insurance had only just come into operation, the increase in the number of accidents is remarkable. In comparison with 1919 there was also a higher percentage of cases entitled to compensation amongst the accidents reported. The number of fatal accidents is noteworthy ; it was 309, of which 85 (27.28 per cent.) occurred in Southern Italy. The months in which the most dangerous work is done are those in the second half of the year in which crops are gathered. Even in the last three months of the half-year the number of fatal accidents rapidly increases ; there were 27 in April, 70 in May and 82 in June. During the half-year the total amount paid in compensation was 1,063,079 liras.

We do not yet possess detailed information regarding the accidents which occurred in the second half-year of 1920, but from a recent communication issued to the press by the *Cassa Nazionale Infortuni* it appears that during the year 1920 41,663 accidents in agricultural work were reported and that 2,830,581 liras were paid as compensation in respect of 39,906 accidents of which 371 were fatal and 1,493 resulted in permanent disablement.

* * *

3. RULES TO BE FOLLOWED IN THE FORMATION OF MUTUAL AGRICULTURAL INSURANCE SOCIETIES — CIRCOLARE N° 3, IN DATA 18 GENNAIO 1921, RIFLATIVA ALLE NORME E DIRETTIVE CIRCA IL FUNZIONAMENTO DELLE COMMISSIONI PER LE MUTUE DI ASSICURAZIONE AGRARIA (DECRETO-LEGGE 2 SETTEMBRE 1919, N° 1759)

To meet the development of agricultural mutual insurance societies and better to regulate their organization, the provisions of the Law of 7 July 1907, No. 526, on small agricultural co-operative societies and mutual agricultural insurance societies have been replaced, as far as the latter class of society is concerned, by the provisions of the Decree-Law of 2 September 1919, No. 1,759, and by the regulations, dated 26 February 1920, made under that law, which we outlined in our issue of July 1920.

In view of the importance of the matter to agriculturists, we think it desirable to supplement the information given in that issue by indicating the fundamental principles which must be followed by the Provincial Commissions contemplated by Article 2 of the Law of 2 September 1919, in examining and approving the rules submitted to them by mutual agricultural insurance societies when applying for legal recognition.

In the general part, the rules of the mutual societies must indicate the sphere of operations. This must be a strictly local area, confined, that is, to a commune, or fraction of a commune, or group of adjacent communes of which the total population does not exceed 5000 inhabitants or, in the case of a large commune divided into *mandamenti*, to a *mandamento*.

In the part relating to the objects of the mutual society, the rules must state that the society has, amongst other objects, that of giving compensation for damage resulting from agricultural risks, that is from the risks of all kinds to which the buildings and fixtures as well as the implements, etc., used in agriculture or forestry are exposed; in the case of mutual live stock insurance societies, the objects must also include the inspection of live stock, veterinary aid, the sanitary improvement of stables and cow-houses and their surroundings, and the means which it is intended to apply to restrict the losses, such as preventive vaccination, disinfection and the strict application of sanitary regulations, must also be enumerated.

It is desired, in fact, that the mutual societies should not only be insurance societies, but should help to watch over and increase the national wealth.

In the part relating to the members, besides laying down the methods for their admission, expulsion or withdrawal, the rules must clearly state their obligation to remain members of the society for at least a year, to insure all the property which they possess which is exposed to the risks in question, with such exceptions as the rules themselves may indicate or may be laid down from time to time by the Committee of Management, as well as their obligation not to insure, under any form whatever, with other insurance institutions, that part of the risk which is not covered by the mutual society as allowed by the rules, and the undertaking which they must give to report immediately any change which may occur in the risks insured, particularly in regard to the health of animals.

As regards fees and premiums, it is noteworthy that the principle is laid down that mutual societies must not generally speaking be recognized which are based on the simple distribution of losses, without fixed premiums payable in advance and proportionate to the values assured. This form has, in fact, two serious disadvantages. In the first place, it is not possible to make the good years compensate for the bad ones; the society cannot build up any reserve fund, and thus in some years the sacrifices which the members are called upon to make may be excessive. A society of this type, again, is condemned to isolation, since it cannot become federated with other societies, and this is clearly to the disadvantage of the members.

As to losses, the rules must, amongst other things, fix the measure in which compensation will be paid (for live stock and fire insurance it must not exceed 80 per cent. of the loss; for other kinds of insurance it may be as much as 90 per cent.) and the circumstances under which the member loses his right to compensation.

The rules must also lay down the method of forming the general reserve fund and the special reserve funds. The general reserve fund must be formed by the general entrance fees, by ten per cent. to be deducted from the special reserve funds and by the interest on the fund itself. It must be devoted to making good depreciation and any losses resulting from the working of the society and to other objects to be determined by the rules. The special reserve funds (for each kind of insurance) are formed by the special entrance fees (fixed by the rules) and by a proportion of the profits resulting from the respective kinds of insurance. The proportion is fixed at 50 per cent. in the case of hail and live stock insurance, and at 20 per cent. for other kinds. These sums must continue to be allocated to the reserve funds until such time as they have reached three times the premiums received during the previous year, in the case of hail and live stock insurance, or twice the premiums in the case of other kinds. There is an important provision that at least half of the reserve funds must be invested in securities issued or guaranteed by the State, and the remainder invested in the shares of local credit institutions — preferably those which supply credit for agricultural purposes — or deposited with such institutions.

In the part of the rules relating to the management of the society, it must be laid down that all the officers of the society shall give their services gratuitously, except the secretary and the treasurer, who may be paid.

In regard to hail insurance, the rules must fix the methods of re-insurance (with the provincial federations, the National Insurance Institute or private concerns). Re-insurance is compulsory; not less than 60 per cent. nor more than 90 per cent. of the risks assumed must be re-insured.

For other kinds of insurance re-insurance is optional, but when risks are re-insured the mutual society must retain at least 30 per cent. of the risks in the case of live stock insurance (except in regard to epidemics in which case the proportion may be reduced to 10 per cent.) and at least 50 per cent. in the case of other kinds of insurance.

Lastly it may be noted that mutual insurance societies may be formed as sections of agricultural co-operative societies (including *affittanze collettive*) and amongst their members, provided they are governed by special rules and are independently managed.

The regulations which we have here outlined are calculated to give to the societies in question an organization based on technical considerations and on sound administrative principles. The work of propaganda, of encouragement and of assistance which will be carried out by the Provincial Commissions for the legal recognition of local mutual societies

will contribute much to the development of mutual agricultural insurance. This is a large field of action in which much still remains to be done in Italy and in this constructive work much reliance is placed on the direct aid of the members of the Commissions who, in view of the method of selection (1) are the best fitted for this purpose, since they are in direct contact with the interested persons and are fully conversant with the agricultural conditions of the region and with the consequent needs in the matter of insurance.

(1) The Provincial Commissions for the legal recognition of local mutual insurance societies are composed of the Director of the Itinerant Agricultural Lecturerships of the chief town of the province and of two experts, of whom one is appointed by the Ministry of Agriculture and one by the Ministry of Industry and Commerce.

Part III: Credit

ARGENTINA.

THE NATIONAL MORTGAGE BANK AND THE LATEST REGULATIONS CONCERNING IT.

OFFICIAL SOURCES:

LEY NO. 10,676. MODIFICANDO LA LEY ORGÁNICA DEL BANCO HIPOTECARIO NACIONAL NO. 8,172 (20 SEPTIEMBRE 1919) — *Boletín Oficial*, Buenos Aytes, 27 September 1919.

BANCO HIPOTECARIO NACIONAL. REGLAMENTACIÓN DE LAS LEYES NOS. 8,172 y 10,676. APROBACIÓN DEL REGLAMENTO (11 DICIEMBRE 1919). — *Boletín Oficial*, Buenos Ayres 17 January 1920.

BANQUE HYPOTHÉCAIRE NATIONALE. RAPPORT SUR LES OPÉRATIONS DE L'ANNÉE 1919. Buenos Aytes, 1920.

The Argentine National Mortgage Bank was established by the Law of 26 October 1886, which was afterwards amended by the Law of September 1911, No. 8,172.

The organization of this Bank has been fully described in previous issues, and we have also indicated the amendments which have been made to the fundamental law, drawing attention to the special measures by which the Government has endeavoured to foster this institution, which is of great importance to a country in process of colonization like the Argentine. But the changed conditions of the Republic have made necessary, in this as in other cases, new regulations better adapted to solve the urgent economic problems, such as those connected with colonization, the encouragement of stock-breeding, etc., and accordingly a new law was promulgated on 22 September 1919 (No. 10,676) which, as we shall see, has notably widened the Bank's sphere of action.

Detailed regulations have been issued for the carrying out of the Law of 1 September 1911, No. 8,172, and that of 22 September 1919, No. 10,676, and these regulations complete the legislative provisions by which the Bank is governed.

§ I. THE BANK'S TRANSACTIONS.

As the Bank is at present organized, taking account of the modifications introduced by Law No. 10,676 as well as by the regulations, its transactions are as follows:

1. The granting of mortgage loans in the form of credit bonds (*cédulas*) convertible into cash secured on lands situated within the boundaries of the Republic;
2. Receiving in the Savings Bank deposits to be converted into bonds;
3. Buying bonds on its own account and buying and selling them on account of other persons;
4. Acquiring property for its own use with the right to sell it again;
5. Accepting, free of charge, the custody of mortgage bonds;
6. Itself insuring the mortgaged properties.

The loans may be granted:

1. For building purposes;
2. For encouraging stock-breeding;
3. For promoting vine-growing and fruit-growing;
4. For facilitating the execution of special sanitation works in the Republic.

The Bank's power to issue bonds, which according to the Law of 24 September 1886, was limited to 50,000,000 pesos and was afterwards increased successively to 160,000,000 pesos and 500,000,000 pesos, has by the Law of 1919 been fixed at the sum of 1,000,000,000 pesos. The new issues are made by numbered series of 50,000,000 pesos and the making of such an issue must be decided by two thirds of the votes of the total number of the Board of Directors and be authorized by a Government decree. The exemption from taxes and from all national or provincial duties which the Bank enjoys in respect of the bonds issued and also the exemption from stamp duty which in certain cases the Bank itself enjoys, is extended to persons who apply for loans and to all the transactions they may have with the Bank.

As to the amount of the loans which may be granted by the Bank to any one person or body, while the Law of 1911 laid down that loans could not be for sums less than 1,000 pesos nor more than 50,000 pesos, the Law of 1919 has extended the upper limit to 1,000,000 pesos.

§ 2. THE VARIOUS KINDS OF LOAN.

Building Loans. — These are granted to owners of small lots of ground situated in the Federal capital, in provincial capitals, in national territories and in towns of the Republic having over 10,000 inhabitants, and are payable by instalments. They must not exceed 60 per cent. of the estimated value of the land and in no case can they be more than 6,000 pesos. They may be also granted to other owners who agree to the conditions laid down by the Bank, provided the loans be used for building workmen's dwellings.

Loans for Land Settlement. — Under the terms of the fundamental law, any public institution, company or private person intending to divide up a rural estate, can ask the Bank's assistance in favour of the settlers who may wish to purchase parcels of land in order to cultivate them.

The Bank grants loans for land settlement secured by mortgage on parcels of rural land which, by reason of their situation in agricultural districts or near railway stations or sea or river ports, may appear suitable for colonization. Such loans may be granted to the purchasing settlers to an amount not exceeding 80 per cent. of the purchase price, but it is necessary that the owners of the estates, whether private persons or institutions, should arrange with the Bank the formalities connected with the division of their estates into lots and the valuation of them.

Another condition laid down by the Bank for granting the loan is that the proprietors shall sell the different lots of land by public auction and that the results of the sale shall be submitted to the Bank's approval.

The regulations lay down the rules to be observed before the loans can be finally concluded.

The applicant must state the area, the position and the special conditions of the estate, its distance from railway stations or ports, etc. He must, moreover, present a plan of the proposed subdivision of the estate, made by an expert, or ask the Bank itself to carry out the subdivision by means of its own technical staff.

The area of any lot must not exceed 200 hectares and the Bank is empowered to determine its size within that limit, in such manner as to render possible its development as a small holding or the adoption of a mixed system of agriculture and stock-breeding.

The sale by auction of the estate intended to be colonized shall be announced by the Bank which shall fix the place, the day and the hour at which the auction is to take place and shall also fix the reserve price of each lot.

Within a year from the date of the auction, the Bank will have the right to sell privately and on the same conditions as at the public sale, for the account of the owner, the lots which may not have been sold by auction, but whatever may be the price obtained by such sale, the Bank must not grant a loan of more than 80 per cent. of the price obtained at the auction for similar lots.

With a view to facilitating the sale of lands for settlement, the Bank may set up temporary agencies in the places where colonies can be formed, appointing the agent who is to carry out the private sale of the different lots as well as the local notary who is to draw up the deed of sale and the loan agreement, so as to save the colonist the cost of transfer.

The Bank may also set up an agency at the Immigration Offices for the purpose of assigning rural lots to agricultural immigrants.

In default of payment of the agreed instalments when due, the colonists will, as a penalty, pay additional interest, in proportion to the amount of the debt. The Bank may only excuse from payment of such penalties those settlers who personally work their own lots of land and who, having followed a mixed system of agriculture and stock-breeding, have been prevented by circumstances beyond their control from complying with the requirements of the law.

If to the same purchaser more than one lot of land be awarded at the auction, the Bank may grant a loan to the extent of 80 per cent. of the price of one only of the lots bought. On the other loans may be granted up to 50 per cent. of the value as estimated by the Bank itself.

The sons of a settler, if of age, are considered as distinct persons and so each of them may benefit by the advantages of the Law.

A settler who has bought a piece of land may in his turn sell it, but the Bank must not accept the transfer if the new purchaser does not himself farm the land.

If one person buys more than one mortgaged lot of land, the Bank will allow the mortgage at the rate of 80 per cent. of the value of the land to remain on one only of the lots ; for the others the loans and the mortgage must be reduced to 50 per cent. of the value. If the buyer does not comply with this arrangement, the Bank will immediately proceed to the sale of the land by auction.

Under the terms of the law the Bank of the Argentine Nation, the National Bank, now in liquidation, the National Mortgage Bank and any other public institution which owns rural property in agricultural districts may benefit by the same advantages offered to settlers.

Loans on Vineyards and Orchards. — The Bank is also empowered to grant loans on the security of vineyards and orchards to the extent of 50 per cent. of the value of the property to be mortgaged at the period of its highest production.

Various rules are laid down by the law for these particular loans.

The mortgager is obliged to notify to the Bank the loss of plants when these exceed 10 per cent. of the whole plantation and the diseases which may affect the plants.

As regards orchards if the loss be such as to reach 30 per cent. of the plants existing at the time the property was valued the Bank will oblige the debtor to renew the plantation. In the latter's default the Bank may immediately proceed to call in the loan.

Loans for the Encouragement to Stock-breeding. — The new law of 1919, with the object of encouraging and increasing stock-breeding provides that the Bank may grant for such purposes loans payable in instalments similar to those granted for buildings purposes. By means of such loans the rural districts best adapted for stock-breeding can be developed, the farms being improved by the installation of a water supply or the execution of other works indispensable to a stock farm.

The Bank may grant loans up to 50 per cent. of the value of the land and of the improvements which are to be made upon it.

An instalment of the loan will be withheld by the Bank until the improvements have been carried out and have been inspected and approved by experts.

§ 3. INSURANCE

Prior to the Law of 1919, the insurance which the Bank required the mortgager to take out was only for the purpose of guaranteeing the

recovery of the loans, in case of damage to the property, and it was therefore sufficient that the insurer should transfer the insurance policy to the Bank. By the new law, however, the Bank has the right to insist that the owner shall insure the property with the Bank itself.

The Bank will insure the property for the amount of the loans granted on them, but if the insurer so desire, the insurance may be extended to cover the value of the property as estimated. If the estate to be mortgaged is already insured by a company recognized by the Bank, the policy will be accepted, but must be made over to the Bank for such time as it remains in force. After this, the insurance will be written by the Bank itself, on such conditions as it may lay down.

For this important function, assigned to the Bank by the new law, of insuring property which has been mortgaged as security for loans granted by it, the Regulations lay down special rules, which we here briefly resume.

The insurance premiums will be fixed by the Bank, but they must never exceed those at the time charged for the same risks by the Argentine Insurance Committee.

If the loan should be repaid before the expiry of the insurance contract, the insurer shall pay the premium for the current half-year, but the insurance will be cancelled together with the mortgage.

In case of loss the Bank will have the damages assessed by its own experts and will fix the compensation, which will be paid to the party concerned either by instalments during the reconstruction or in a lump sum when the reconstruction has been completed.

If the loss should be complete, the Bank after having had the damages assessed and having fixed the compensation, will also fix the time within which the reconstruction is to be finished. If it is not finished within the time fixed or if, before it is finished, the debtor should delay the payment of his debt, the Bank shall apply the amount of the compensation to the total or partial cancelling of the loan.

When the compensation is not sufficient to cover the total debt the Bank will withhold it in part payment of the debt and will then proceed to the sale, by auction and for cash, of the property as it stands. Even in case of partial losses, the Bank will fix the period of time in which the reconstruction is to be completed and if it should not be finished within that period, will hold back the amount of the compensation in part payment of the debt and proceed to the sale of the property by auction.

§ 4. THE SALE OF PROPERTY ON WHICH THE BANK HAS FORECLOSED.

The Bank will draw up each year rules for the sale by auction of the lands belonging to debtors who have not repaid their loans at the due dates or according to the methods laid down by the law. These sales, the expenses of which will be charged to the debtors, may be carried out in one or more lots, according to whether the Bank deems it desirable or not to divide the mortgage for this purpose.

If the property is not sold within the period fixed by the Bank, another auction will be held within the following ninety days, the reserve price being fixed by the Bank at a figure which may not be below the amount of the mortgage and of the expenses, less the sums already repaid. If no offer be made for the property, the Bank will be always entitled to have it adjudicated to itself at the reserve price fixed for the last sale.

The Bank may sell the properties so adjudicated to it subdividing them in order that they may be better adapted for farming, and is always empowered to postpone for a year, from the date of the adjudication, the final settlement of the loan, so as to sell within that time the property adjudicated to it. It may also, within the year, agree with the mortgager for the repayment of his debt, principal, interest and expenses, and may restore the property to him.

If a property, already adjudicated to the Bank, is in course of sale, the Bank, according to the new Law No. 10,676, may carry out, at the debtor's expense, all the repairs that it may consider to be necessary, pay taxes and take any other steps with a view to the maintenance of the property. Moreover, the Bank may sell the property in its entirety or sell parts of it or may transfer to the local municipality, gratuitously or at a reasonable price, the land necessary to open up roads, etc.

The Bank has also the right to represent the debtor in any action brought against him concerning the property or to bring actions against other persons in occupation of the property.

§ 5. THE FINANCIAL POSITION OF THE BANK ON 31 DECEMBER 1919.

We close these notes by briefly examining the financial position of the Bank for 1919.

Bonds. — The bonds in circulation on 31 December 1918 amounted to 591,113,175 pesos. In 1919, others were issued to the value of 94,897,750 pesos and bonds to the value of 73,565,300 pesos were withdrawn, so that the circulation on 31 December 1919 amounted to 612,445,575 pesos.

The increase of the bonds in circulation from 1912 to 1919 is shown in Table I (page 354).

Loans. — The loans applied for in 1919 numbered 4,843 and amounted to 163,601,169 pesos, as compared with 4,218 applications for loans amounting to 131,921,919 pesos in 1918.

The loans granted in 1919 were 4,231 for a total amount of 119,783,750 pesos whilst in 1918 they were 3,583 for a total of 116,608,100 pesos.

The loans entered upon the books in 1918 were 3,503 for a total amount of 81,286,950 pesos and in 1919 they were 3,848 for a total amount of 94,897,700 pesos.

The movement of the registered loans in the period between 1912 and 1919, 1915 excluded, no loans having been granted in that year, was as shown in Table II (page 354):

TABLE I. — *Circulation of Bonds from 1912 to 1919.*

Year	Bonds in circulation on 31 December	Issues		Average quota- tion of the 6 % bonds	Loans outstanding on 31 December
		Series	Increase		
	pesos		pesos	cents	pesos
1912	442,538,175	C. H. A. 6 %	140,647,900	97.36	485,324,126
1913	499,426,600	C. H. A. 6 %	91,062,700	97.42	552,713,562
1914	535,162,850	2nd Law 9155, 1st Series	49,926,300	87.44	586,629,145
1915	520,297,100	—	—	90.37	577,572,840
1916	512,897,075	2nd Law 9155, 2nd Series	9,305,300	94.26	574,829,407
1917	543,500,900	2nd Law 9155, 2nd, 3rd Series.	49,695,200	93.47	607,567,307
1918	591,113,175	2nd Law 9155, 2nd, 3rd, 4th Series	81,286,950	99.45	655,859,776
1919	612,445,575	2nd Law 9155, 4th, 5th, 6th Series.	94,897,700	96.04	704,672,880

TABLE II. — *Movement of Registered Loans from 1912 to 1919.*

Years	Loans on urban prop- er- ties		Loans on rural prop- er- ties	
	Amount		Amount	
		pesos		pesos
1912	4,295	80,312,200	765	51,335,700
1913	3,281	57,764,500	746	33,298,300
1914	1,520	26,725,400	476	28,200,900
1915	—	—	—	—
1916	338	4,947,100	76	4,358,200
1917	2,008	21,213,500	605	28,471,700
1918	2,474	31,096,550	1,029	50,103,400
1919	2,603	34,723,950	1,245	60,173,750

The classification of the loans according to their amount for 1919 is shown in Table III (page 355).

TABLE III. — *Loans Classified according to their Amount.*

				Loans on urban proper- ties	Amount	Loans on rural proper- ties	Amount
					pesos		pesos
Between	1	and	10,000 pesos	1848	8,968,350	483	2,811,400
"	10,100	"	20,000 "	420	6,260,100	254	3,677,750
"	20,100	"	50,000 "	247	7,996,700	232	7,659,000
"	50,100	"	100,000 "	55	4,291,500	120	8,726,900
"	100,100	"	250,000 "	26	4,024,300	102	16,715,300
"	250,100	"	500,000 "	6	2,233,000	51	18,543,400
"	500,100	"	750,000 "	—	—	2	1,200,000
"	750,000	"	1,000,000 "	1	950,000	1	840,000

As we have already mentioned, many of the new regulations of the Mortgage Bank are intended to encourage small holdings. Therefore we give in Table IV (page 356) the classification of loans granted to benefit small holdings, classifying them with regard to their amount as well as to the size of the estates on which the loans are secured.

As the table shows, the loans granted by the branch districts are much more numerous than those granted in the national territories (1).

(1) The Report of the Bank distinguishes its various spheres of operation as follows: The Federal Capital (Buenos Ayres); National Territories (Pampa, Rio Negro, Neuquén, Chubut, Chaco, Misiones), and Branch Districts (La Plata, Bahía Blanca, Tandil, Lincoln, Rosario, Santa Fé, Paraná, Uruguay, Corrientes, Córdoba, Santiago del Estero, Tucumán, Salta, Catamarca, San Luis, Mendoza, San Juan).

TABLE IV. — *Loans Granted on Small Rural Properties during the year 1919.*

Hectares	Up to 2,000 pesos		From 2,001 to 5,000 pesos		From 5,001 to 10,000 pesos		From 10,001 to 20,000 pesos		From 20,001 to 30,000 pesos		From 30,001 to 40,000 pesos		From 40,001 to 50,000 pesos		From 50,001 to 100,000 pesos		Total		
	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount			
From 1 to 25	34	49,850	92	299,400	29	215,700	11	157,050	2	45,000	1	35,000	1	46,500	—	—	109	848,500	
26 50	1	2,000	32	128,300	23	171,300	11	131,000	5	133,000	1	40,000	—	—	—	—	73	605,000	
51 100	1	2,000	33	147,550	41	331,000	37	504,700	9	225,800	1	34,000	—	—	—	—	122	1,245,050	
101 150	1	1,700	3	12,000	28	193,100	38	490,500	4	348,300	4	142,000	—	—	—	1	100,000	81	1,287,600
151 200	—	—	—	—	20	184,100	58	826,000	11	278,700	7	249,800	5	229,000	1	69,000	102	1,833,600	
Total	37	55,550	15	587,250	141	1,095,800	147	2,109,250	41	1,030,800	14	500,800	6	275,500	2	169,000	547	5,823,050	

I. In the Branch Districts.

From 1 to 25	34	49,850	92	299,400	29	215,700	11	157,050	2	45,000	1	35,000	1	46,500	—	—	109	848,500	
26 50	1	2,000	32	128,300	23	171,300	11	131,000	5	133,000	1	40,000	—	—	—	—	73	605,000	
51 100	1	2,000	33	147,550	41	331,000	37	504,700	9	225,800	1	34,000	—	—	—	—	122	1,245,050	
101 150	1	1,700	3	12,000	28	193,100	38	490,500	4	348,300	4	142,000	—	—	—	1	100,000	81	1,287,600
151 200	—	—	—	—	20	184,100	58	826,000	11	278,700	7	249,800	5	229,000	1	69,000	102	1,833,600	
Total	37	55,550	15	587,250	141	1,095,800	147	2,109,250	41	1,030,800	14	500,800	6	275,500	2	169,000	547	5,823,050	

II. In the National Territories.

From 1 to 25	1	1,500	2	7,200	2	12,300	1	11,000	—	—	—	—	—	—	—	—	6	32,000
26 50	1	1,800	21	4,600	2	12,500	1	12,000	—	—	—	—	—	—	—	—	6	30,000
51 100	—	—	31	145,700	4	34,500	6	81,000	1	24,500	—	—	—	—	—	—	42	285,700
101 150	—	—	1	3,000	3	25,000	1	13,000	—	—	—	—	—	—	—	—	5	41,000
151 200	—	—	—	—	10	65,000	1	17,900	2	13,300	1	37,500	—	—	—	—	14	103,700
Total	2	3,300	36	160,500	21	149,300	10	134,900	3	67,800	1	37,500	—	—	—	—	73	553,300

I. In the Branch Districts.

II. In the National Territories.

Part IV : Miscellaneous Questions relating to Agricultural Economy

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I. — ECONOMIC AND SOCIAL CONDITIONS OF THE AGRICULTURAL CLASSES

— —

GREAT BRITAIN AND IRELAND.

EARNINGS AND WORKING HOURS OF FARM-WORKERS IN SCOTLAND (*Continued*).

SOURCE (OFFICIAL).

WILSON (Sir James), K. C. S. I. : Report to the Board of Agriculture for Scotland on
Farm-Workers in Scotland in 1919-20 Edinburgh, 1921.

I. — EARNINGS (*Continued*).

§ 4 PLOUGHMEN UNDER 21 AND OVER 60.

According to the returns received 332 youths under 21 were employed as ploughmen on the 1,096 farms, and their average total earnings were for all Scotland 43s. 2d. per week (cash 33s. 11d., allowances 9s. 3d.). On the same farms only 52 ploughmen were returned as over 60, and the average weekly value of their total earnings was 45s. 7d. (cash 35s. 9d., allowances 9s. 10d.).

§ 5. CATTLEMEN BETWEEN 21 AND 60.

For all Scotland the average total earnings of the 360 married cattlemen were practically the same as those of the married ploughmen, the average value of the allowances being somewhat greater, and the cash wage being somewhat less than that of the married ploughman — the reason for the difference probably being that often the cattlemen has an allowance of milk or the keep of a cow where the ploughman has none.

The average weekly earnings of married cattlemen between 21 and 60 for the whole of Scotland was 49s. 9d. (cash 36s. 5d., allowances 13s. 4d.). For single cattlemen, the average weekly earnings for the whole of Scotland were 43s. 7d. (cash 29s. 11d., allowances 13s. 8d.).

Table XI (p. 359) shows the average weekly earnings of all cattlemen (married and single).

§ 6. SHEPHERDS BETWEEN 21 AND 60.

For all Scotland the average weekly earnings of the 277 married shepherds between 21 and 60 were 48s. 4d. per week, as compared with 50s. 3d., the average for the married ploughmen ; but the average value of the shepherd's allowances was 14s. 9d., as compared with 10s. 7d. for the ploughman, and the average cash wage was only 33s. 7d. for the shepherds as against 39s. 8d. for the ploughmen. The married shepherd's allowances are generally considerably more valuable than those of the married ploughman. He often gets 80 stones of oatmeal a year instead of 65, and more often has the keep of one or two cows, and of several sheep ("a pack"), whose wool and lambs belong to him, and can generally keep a pig and poultry.

Few Committees have ventured to place an average cash value on the keep of a pack. The Dumfries and Galloway Committee have valued it at twice the rental per sheep paid by the employer, and in Shetland the value has been estimated at 20s. per annum for a blackface or cross ewe, and at 7s. 6d. for a Shetland ewe. In hilly country many shepherds are allowed to cut peat during their employer's time, and the carting is done by the farmer. One Committee estimates the value of this privilege at £5 4s. per annum and others at £4 or £6.

A shepherd has to keep one or more dogs, and although he is generally allowed to feed them on the flesh of fallen sheep, most District Committees have fixed the minimum wage for the shepherd at 2s. 6d. or 3s. a week higher than for the ploughman, for each dog which he is required by the conditions of his employment to keep and feed.

The average weekly earnings for the whole of Scotland of unmarried shepherds was 42s. 7d. (cash 28s. 11d., allowances 13s. 8d.).

Table XII (p. 360) shows the average weekly earnings of all shepherds (married and single) between 21 and 60.

§ 7. ORRAMEN BETWEEN 21 AND 60.

The male farmworkers, other than the ploughmen, cattlemen, and shepherds (all of whom are in charge of animals), have been classed together as "orramen" (odd men). The number so classed on the farms for which returns have been received is 424 out of a total permanent male staff of 3,699, that is, less than 12 per cent. The orraman may be a man engaged for special work, such as hedging, ditching, mole or rabbit catching, or the charge of valuable machinery ; or he may be getting too old for a hard day's work,

TABLE XI. — *Average Weekly Earnings of all Cattlemen (Married and Single) between 21 and 60 in the Winter Half-year 1919 20.*

County	Average cash wages per week		Average value of allowances per week		Average earnings per week	
	s.	d.	s.	d.	s.	d.
Forfar	43	10	18	6	62	4
Fife	43	10	14	1	57	11
Dumbarton	46	11	9	5	56	4
Glasgow	45	4	9	11	55	3
Selkirk	43	8	11	4	55	0
Kincardine	35	1	18	0	53	1
Renfrew	44	6	7	9	52	3
Kinross	37	6	14	3	51	9
Clackmannan	39	0	12	1	51	1
Haddington	44	3	5	5	49	8
Perth	34	6	15	1	49	7
Linlithgow	41	0	8	2	49	2
Roxburgh	37	9	11	1	48	10
Ayr	36	8	12	2	48	10
Nairn	32	8	16	1	48	9
Dumfries	36	5	12	3	48	
Berwick	38	7	10	0	48	7
Wigtown	28	2	20	3	48	5
Midlothian	43	3	4	11	48	2
Stirling	37	1	10	10	47	11
Peebles	41	2	6	7	47	9
Aberdeen	29	9	16	5	46	2
Kirkcudbright	35	8	10	0	45	8
Banff	31	0	14	1	45	1
Moray	30	7	14	5	45	0
Ross et Cromarty	27	11	16	2	44	1
Inverness	27	2	15	1	42	3
Argyll	27	8	14	3	41	11
Bute et Arran	24	0	16	0	40	0
Sutherland	20	0	18	10	38	10
Caithness	18	9	17	5	36	2
Orkney	18	3	16	4	34	7
Shetland	—	—	—	—	—	—
All Scotland	34	11	13	5	48	4

TABLE XII. — *Average Weekly Earnings of all Shepherds (Married and Single) between 21 and 60 in the Winter Half-Year 1919-20.*

Country	Average cash wages per week	Average value of allowances per week	Average earnings per week
Forfar	45 0	16 2	61
Clackmannan	47 0	13 2	60
Fife	40 8	16 5	57
Kincardine	35 1	19	54
Linlithgow	47 0	6 0	53
Nairn	32 9	18 11	51
Roxburgh	31 8	19 9	51
Selkirk	35 5	15 9	51
Berwick	39 1	11 8	51
Aberdeen	34 11	15 8	50
Ayr	35 9	13 8	49
Haddington	42 3	6 11	49
Lanark	37 8	11 0	48
Renfrew	41 6	6 8	
Kirkcudbright	37 1	10 4	47
Bute et Arran	42 0	5 5	47
Ross et Cromarty	25 5	21 10	47
Perth	30 0	16 9	46
Dumbarton	35 6	11 1	46
Kinross	29 6	17 0	46
Midlothian	40 0	6 3	46
Dumfries	35 2	10 10	46
Peebles	30 8	14 10	45
Stirling	33 11	9 10	43
Banff	29 0	14 0	43
Inverness	25 2	17 10	43
Argyll	24 10	18 1	42
Moray	27 11	14 10	42
Sutherland	19 7	22 2	41
Shetland	31 0	9 6	40 7
Wigtown	23 6	15 3	38 9
Calthness	16 8	21 7	38 3
Orkney	17 0	16 6	33 6
All Scotland	32	14 8	47

and be kept on to help the other hands when necessary ; or he may be a youth under training. His wages vary according to his occupation, responsibilities and qualifications ; but the average total earnings of the 194 married orramen between 21 and 60 employed on these farms were 47s. 7d. per week — 2s. 8d. less than the 50s. 3d., which was the corresponding average for the ploughmen.

Table XIII (p. 361) shows the average weekly earnings of all orramen (married and single).

§ 8. ALL MALE FARM-WORKERS, OTHER THAN STEWARDS, GRIEVES
AND FOREMEN.

Putting together, without distinction between married and single, all the 3,699 male farm workers employed on these farms (other than stewards, grieves, and foremen), and classifying them according to age, the average total earnings were as shown in Table XIV (page 363).

TABLE XIII. — *Average Weekly Earnings of all Orramen
(Married and Single) between 21 and 60 in the Winter Half-year 1919-20.*

County	Average cash wages per week		Average value of allowances per week		Average earnings per week	
	s.	d.	s.	d.	s.	d.
Perth	46	6	9	8	56	2
Forfar	41	11	11	6	53	5
Clackmannan	50	0	2	10	52	10
Renfrew	41	2	10	7	51	9
Kincardine	35	7	16	2	51	9
Lanark	39	3	11	7	50	10
Stirling	45	6	5	3	50	9
Fife	43	2	7	1	50	3
Dumbarton	41	8	8	4	50	0
Ayr	42	8	6	3	48	11
Aberdeen	27	9	18	5	46	2
Berwick	39	8	6	2	45	10
Roxburgh	36	4	9	0	45	4
Midlothian	41	7	3	7	45	2
Linlithgow	41	5	3	6	44	11
Moray	28	5	16	2	44	7
Haddington	41	1	3	3	44	4
Dumfries	33	3	10	8	43	11
Inverness	38	6	4	10	43	4
Selkirk	34	6	7	10	42	4
Peebles	37	0	5	4	42	4
Kinross	24	3	18	1	42	4
Ross et Cromarty	30	3	12	1	42	4
Banff	29	9	12	0	41	9
Kirkcudbright	34	9	6	5	41	2
Wigtown	31	2	9	11	41	1
Bute et Arran	40	0	1	1	41	1
Sutherland	29	3	8	9	38	0
Shetland	22	0	15	0	37	0
Caithness	27	9	9	1	36	10
Argyll	27	9	9	0	36	9
Orkney	18	3	16	9	35	0
Nairn	—	—	—	—	—	—
All Scotland	37	11	8	3	46	2

TABLE XIV. — *Average Total Earnings of all Ploughmen, Cattlemen, Shepherds and Orramen.*


Class of Worker	Average total weekly earnings					
	Under 21		Between 21 and 60		Over 60	
	s.	d.	s.	d.	s.	d.
Ploughmen	43	2	49	2	45	7
Cattlemen.	37	1	48	4	47	0
Shepherds.	40	1	47	5	42	6
Orramen	37	7	46	2	42	7

§ 9. STEWARDS, GRIEVES AND FOREMEN.

On most large farms one of the wage-earning farm-workers is placed in a position of higher responsibility than the others, over whom he exercises control. In the south-east of Scotland he is called "steward," elsewhere "grieve" or "foreman." In the Census of 1911, 7,250 men of this class were returned out of a total population of wage-earning farm-workers, male and female, of 102,869. The average earnings for 1919-20 of 377 of these men, according to the returns now received, comes to 54s. 4d. (cash 40s. 10d., allowances 13s. 6d.) per week.

§ 10. GRADATION OF WAGES.

While these were the average total weekly earnings of the men regarding whom returns have been received, there were naturally great differences between the actual earnings of the individual men. For instance, in Wigtown, while the average earnings of the 51 ploughmen between 21 and 60 were 45s. 10d., 11 of them had less than 43s. and 9 had over 50s. per week.

Within a county the wages paid vary with the character of the farm and its distance from industrial centres, and even on the same farm the wages paid to men performing the same kind of work vary according to their skill and efficiency. Often, although the cash wage may be the same a difference is made in the amount of the allowances. 

§ 11. PERMANENT WOMEN-WORKERS.

For the whole of Scotland returns have been received for 672 women and girls permanently employed in farm work, as distinguished from domestic service. Classified according to age, their average weekly earnings are as shown in Table XV (page 364).

TABLE XV — *Average Weekly Earnings of all Permanent Women-Workers in Scotland*

Age	Number	Average weekly earnings					
		Cash		Allowances		Total	
		s	d.	s.	d.	s	d.
Under 21	150	20	5	4	9	25	2
From 21 to 60.	513	22	6	3	8	26	2
Over 60	9	23	4	3	2	26	6
	• 672						

In the south and in the east of Scotland as far north as Fife, it is common for women to be employed as out-workers, taking their share in all work of the farm with the exception of ploughing. (In the Census of 1911 for all Scotland only 85 women were returned as being in charge of horses and 11 as shepherds). In the dairying counties, chiefly in the south-west, women are often permanently employed on work in the dairy or the byre. (In the Census of 1911 for all Scotland, 6,127 females were returned as in charge of cattle)

Where women are commonly employed as permanent out-workers, and the married men are engaged for the year, the women also are generally engaged for the year, especially in the south and south-east of Scotland, where they are termed "bondagers." Elsewhere the engagement is usually for six months from Whitsunday or Martinmas.

Where women and girls do not live at home, but are boarded and lodged in the farm-house they are paid a lower cash wage, the amount to be deducted having been estimated by the District Committees at rates varying from 10s. a week in the Northern Counties to 20s. a week in the Lothians and Peebles.

In a few cases, especially in the south of Scotland, a woman is supplied with a cottage on the farm (cotwoman) and with allowances similar to those of a married man, but smaller in quantity. The harvest fee is paid at the same rate as to the male workers. Extra money is sometimes earned by singling turnips after ordinary hours at piece-rates, and milking is often done by a male worker's wife or daughter, the usual payment for this work being in 1919-20 from 7s. to 10s a week for milking 10 cows night and morning.

On the whole the average value of a woman-worker's total earnings between 21 and 60 in 1919-20 was about double what it had been in 1914, and not much more than half that of the ploughmen between those ages. Table XVI (page 365) shows the average weekly earnings of all women-workers between 21 and 60.

TABLE XVI. — *Average Weekly Earnings of All Permanent Women-Workers (Married and Single) between 21 and 60 in the Winter Half-Year 1919-20.*

County	Average cash wages per week		Average value of allowances per week		Average earnings per week	
	d.	s.	d.	s.	d.	s.
Bute et Arran	25	6	8	8	34	2
Dunbarton	23			11	32	5
Ayr	23	10	7	5	31	3
Lanark	19	1	11	8	30	9
Moray	24	3		2	30	5
Renfrew	23	7	6	4	29	11
Peebles	17	11	11		29	7
Selkirk	26	5	2	9	29	2
Kinross	17	4	11	3	28	7
Stirling	26	0	2	5	28	5
Argyll	17	0	10	11	27	11
Inverness	25	0	2	11	27	11
Linlithgow	21	6	6	3	27	9
Roxburgh	25	0	2	2	27	2
Haddington	25	9	1	2	26	11
Aberdeen	12	9	14	0	26	9
Berwick	21	5	1	7	26	0
Dumfries	21	5	4	2	25	7
Forfar	25	4	—	—	25	4
Clackmannan	16	2	8	10	25	0
Orkney	13	9	11	0	24	9
Kirkcudbright	22	6	2	2	24	8
Kincardine	22	0	2	6	24	6
Nairn	11	6	12	6	24	0
Midlothian	22	11	1	0	23	11
Perth	17	4	6	6	23	10
Wigtown	20	0	3	7	23	7
Ross et Cromarty	20	7	2	9	23	4
Fife	21	5	1	6	22	11
Caithness	13	10	7	4	21	2
Banff	—	—	—	—	—	—
Shetland	—	—	—	—	—	—
All Scotland	22	6	3	8	26	2

§ 12. CASUAL WORKERS.

On most farms in Scotland, except in the busy seasons, practically the whole of the farm-work is done by the permanent staff and even at busy times the number of workers temporarily employed is much smaller than it used to be before labour-saving machinery came into general use. It is still, however, the custom at hay-time and harvest and when potatoes are being planted or lifted, to employ a number of temporary hands, mostly women and children obtained from the cottages on or near the farm, or from neighbouring villages. In 1919, during harvest, men employed by the week were usually paid from 30s. to 40s. a week with board and lodging, or from £2 10s. to £3 without board. Some men were engaged for the four or five weeks of harvest to be paid "wet or dry." Others were paid only for the days on which the weather permitted work to be done, the commonest rate being 10s. per day of 10 hours in harvest. But in the Lothians some men were paid at harvest 8s. a day, in Wigtown and Kirkcudbright 9s. and in Argyll 6s. or 6s. 6d. In Ayr some men were engaged for harvest-work at 1s. 2d. per hour. Common rates for women in harvest in 1919 were 5s. and 6s. per day, paid only when work was done, but in Ayr some women were paid 8s. a day, in Argyll 3s. 6d. or 4s. per day, and in Forfar 1s. per hour. For potato-planting and lifting somewhat similar rates were paid in the potato-growing counties, but elsewhere or in less busy times lower rates were paid, such as for women 4s. per day, and in Caithness 4½d. per hour. In general these rates are about double those customary before the war.

§ 13. PIECE WORK.

Very little piece work is done on farms throughout Scotland, except hoeing and shawing turnips, for which the rates commonly paid in 1919 per hundred yards were 3d. and 4d.; but in Berwick some women were paid 2½d. and in Perth 5d. per hundred yards. In Forfar and Ross in some cases 20s. per acre was paid. These rates are about double those common before the war. In some parts of the country it is common for the permanent workers to add to their earnings by doing piece work among the turnips after working hours.

(To be continued).

ITALY.

AGRICULTURAL COLONIES FOR THE ORPHANS OF PEASANTS KILLED IN THE WAR.

OFFICIAL SOURCES :

- DECRETO LUOGOTENENZIALE 6 AGOSTO 1916, N. 968, CONCERNENTE DISPOSIZIONI A FAVORE DEGLI ORFANI DI GUERRA.
- DECRETO LUOGOTENENZIALE 6 AGOSTO 1916, N. 1025, CHE ERIGE IN ENTE MORALE L'OPERA NAZIONALE PER GLI ORFANI DEI CONTADINI MORTI IN GUERRA E PER I FIGLI DEI CONTADINI PERMANENTEMENTE INABILI AL LAVORO E NE APPROVA LO STATUTO.
- DECRETO LUOGOTENENZIALE 27 AGOSTO 1916, N. 1251, COL QUALE È APPROVATO IL REGOLAMENTO PER L'ATTUAZIONE DELLE NORME VIGENTI PER L'ASSISTENZA AGLI ORFANI DI GUERRA.
- LEGGE 18 LUGLIO 1917, N. 1143, PER LA PROTEZIONE E L'ASSISTENZA DEGLI ORFANI DI GUERRA.
- DECRETO LUOGOTENENZIALE 30 GIUGNO 1918, N. 1044, CHE APPROVA IL REGOLAMENTO PER L'ESECUZIONE DELLA LEGGE SOPRACITATA.
- REGIO DECRETO-LEGGE 2 SETTEMBRE 1919, N. 1660, CHE AUTORIZZA LA CASSA DEPOSITI E PRESTITI A CONCEDERE ALLE PROVINCE MUTUI DI FAVORE DESTINATI ALL'ACQUISTO DI TERRENI E FABBRICATI, ALLA COSTRUZIONE E RESTAURO DEI FABBRICATI STESSI, NONCHÉ ALL'IMPIANTO DI COLONIE AGRICOLE PER GLI ORFANI DEI CONTADINI MORTI IN GUERRA.
- LA PROTEZIONE D'ASSISTENZA DEGLI ORFANI DI GUERRA. Relazione di S. E. il Presidente del Consiglio dei Ministri, Ministro dell'Interno, al Parlamento. Ministero dell'Interno. Direzione generale dell'amministrazione civile. Rome, 1920.

OTHER SOURCES :

- LE COLONIE AGRICOLE PER GLI ORFANI DEI CONTADINI CADUTI IN GUERRA. Illustrazioni e note. Opera nazionale per gli orfani dei contadini morti in guerra, Rome 1921.
- SOTGIU (Lorenzo) : Le colonie agricole. *I Campi*, N° 15, Rome, 13 April 1919.
- CASALINI (Mario) : Le Colonie agricole a congresso. Report presented to the Congress of Agricultural colonies held at Bologna in October 1920.
- DO. : Colonie agricole per contadini. Alcuni esempi. *Il Villaggio ed i Campi*, N° 18. Milan-Rome, 30 April 1921.
- FEROLDI (Dott. G.) e DALL'AGLIO (Prof. A.) : La colonia agricola per i figli dei contadini di Mantova, nei primi quattro anni di vita. Mantua, Mondovì, 1920.
- PONZIANI (Elisabetta) : La colonia agricola " Carlo di Frassinello " a Calenzano. Florence, 1920.

Among the many efforts made in Italy to mitigate the damage caused by the war, one of the most provident and beneficent is that of the foundation of agricultural colonies in which the orphans of peasants who died in the war (1) may be trained to follow their fathers' occupation. This form of assistance was preferred to orphan asylums and ordinary houses of refuge, as being better adapted to evoke love of the fields in those born amongst them, and as being more likely to form worthy citizens by means

(1) Statistics show that the orphans of peasants are about 70 per cent. of the whole number of war orphans.

of adequate technical instruction, imparted on a farm large enough for the normal carrying on of agriculture. The movement received full support from the government, and soon extended to the various provinces. To direct and organize it the *Opera nazionale per gli orfani dei contadini morti in guerra* was instituted in Rome in December 1915. Of this we shall give some account before passing on to describe the agricultural colonies, which have for the most part arisen under its impulse and with its aid.

§ 1. THE "OPERA NAZIONALE PER GLI ORFANI DEI CONTADINI MORTI IN GUERRA" AND THE PROVINCIAL "PATRONATI."

The first regulations for the protection and assistance of war orphans were laid down in 1916 by the Lieutenantcy Decrees of 6 and 27 August, Nos. 968 and 1,251. They were afterwards extended and made more definite by the Law of 18 July 1917, No. 1,143 and by two executive regulations: a general one of 30 June 1918, No. 1,044 and a second, more special, of the same date, No. 1,003. Under the terms of the Law of 18 July 1917 the *Opera Nazionale*, already given legal existence by the Decree of 5 August 1916, was formally recognized as a national institution for the assistance of war orphans. According to its by-laws its objects are:

(a) to see that assistance to orphan children of peasants shall be given by special local *patronati* or other institutions;

(b) to promote and encourage the formations of *patronati* and agricultural colonies in the various regions of Italy, to receive the orphans of peasants killed in the war and children of peasants who cannot be maintained and be given a suitable technical education in their own families;

(c) to co-ordinate the action of the local *patronati*, of the agricultural colonies, and of other institutions with similar objects;

(d) to form one or more bodies in connection with existing credit institutions to give to the orphans facilities for purchasing small rural holdings to be cultivated by themselves when they reach their majority.

Where there are *patronati* on agricultural colonies legally constituted and recognised by the *Opera Nazionale*, assistance to the children of peasants will ordinarily be given by them; in their absence special assistance will be given by the *Opera Nazionale* by means of its own representatives. Generally speaking, the functions of the *Opera Nazionale* extend to every method of improving the condition of the orphans, with special regard to their settlement in life when they become of age.

The Law of 18 July 1917 lays special stress on one form of assistance, that of giving the orphans facilities for the acquisition of small holdings (either held in emphyteusis or in full ownership), as well as of agricultural implements and other requisites.

The work of the *Opera Nazionale* is thus a complicated undertaking, inspired by a lofty conception of social reconstruction, and aims at attracting the orphans to the labours of the fields and making them experienced cultivators.

The management* of the *Opera Nazionale* is entrusted to the General Meeting of members (1), a General Council and an Executive Committee chosen from the members of the Council. As local organizations for giving assistance on similar lines in all parts of the kingdom, *patronati* have been formed in each province with sections and subsections within the limits of the province. Besides these there have also been formed regional or provincial agricultural colonies, of which we shall shortly speak separately.

The provincial *patronati* are organized on the same lines as the central body, but they enjoy large administrative autonomy which permits of their carrying out their own task without delay, adapting it to the special requirements and characteristics of each province. They include various classes of members — *oblatori*, ordinary, *benemeriti*, perpetual honorary — thus distinguished according to the amount of their contributions. They undertake every kind of assistance to the orphans, and in accordance with the principles of the *Opera Nazionale* to which they are attached, they endeavour more especially to keep alive the love of the land, and to help the orphan to perfect himself in his father's occupation; they are therefore interested in the formation of agricultural colonies.

The formation of *patronati* was rapidly carried out; in many provinces they were formed as soon as the *Opera Nazionale* had acquired a legal existence, and in other provinces they were formed shortly afterwards.

The *patronati*, being provincial organizations, should have committees, delegations or single communal representatives dependent upon them, so as to extend their labours to every small centre, and particularly to rural centres where orphan children of peasants are living. This organization of local representatives is not yet sufficiently developed. In some provinces, for instance Novara, Turin, Sondrio, Brescia, Parma, Placentia, Venice, Rovigo, Palermo and Trapani, the network of communal representation may be considered complete; in others it is limited to the formations of sections in the chief towns of districts; in others, as in Rome and Bologna, for local supervision the *patronato* avails itself of special commissions nominated according to art. 12 of the Law of 18 July 1917, No. 1,143.

The work carried on by the provincial *patronati* in relation to their objects and to the financial means at their disposal is in general satisfactory.

To extend their labours, they try to collect means to their own, often giving proof of a great spirit of initiative.

A typical example of solid organization and of enlightened activity is given by the *Patronato* of Venice. It undertakes the care of all the war orphans of the province, except those of the chief town and of three of the four communes of the estuary, which are under the care of a special com-

(1) Members are divided into the following classes: (a) *oblatori*, all institutions (co-operative and mutual) which pay an annual subscription exceeding 50 liras; (b) ordinary, all who pay annually 10 liras; (c) *benemeriti*, all bodies, ministries, provinces, communes, savings-banks, chambers of commerce, organizations, and individuals whose annual subscription is not less than 100 liras; (d) honorary perpetual, all bodies paying periodically at least 500 liras.

mittee. It has appointed 80 delegations, and employs a lady inspector for supervision. It has made successful efforts, and is continuing to do so, to ensure that no orphan shall be neglected; it does not limit its assistance to grants of money, but also supplies farming implements; it has also distributed many milch-cows, thus supplying necessitous families of orphans with an excellent means of earning money, and at the same time encouraging the breeding of live stock. By carrying on an active propaganda, it has succeeded in obtaining from landowners small tracts of land for the purpose of converting them into market gardens and granting them to orphans who will undertake to cultivate them.

It has already set on foot the improvement of a large tract of land to make a colony for 200 orphans, to be managed on the co-operative system, with special rights for the orphans and their relatives. It is also organizing a practical school for the cultivation of flowers and of useful, industrial and ornamental plants.

To attain its objects the *Opera Nazionale* avails itself of its own financial resources (income from property, annual subscriptions of members, donations, legacies, temporary grants and miscellaneous receipts) and contributions from the State.

In 1918 the central organization of the *Opera Nazionale* possessed capital funds amounting to about 500,000 liras, and the provincial *patronati* already possessed capital funds amounting to about 4 millions.

At the beginning of 1919 the net capital funds of the central organization amounted to 531,085 liras, and those of the provincial *patronati* to about 6 millions. Another great resource was in the contributions of the provincial and communal administrations, which, by a happy idea, they requested to contribute annually at the rate of five centesimi for every inhabitant. In 1918 the *Opera Nazionale* could thus count upon an annual contribution of 435,000 liras from the provincial administrations, and 475,000 liras from the communes. In 1919 the contribution of the provinces was calculated at 465,000 liras, and that of the communes at about half a million. Some communes desired to exceed the limit of the sum requested; those of the province of Milan fixed a rate of 10 centesimi per inhabitant, and those of the province of Parma went still further, fixing the rate at 14 centesimi.

The regular income, however, although considerable, would not have allowed of giving assistance to orphans to the desired extent. In conformity with the principles laid down in the Decrees of 6 and 27 August 1916, and in the Law of 18 July 1917, the State intervened to support largely the work of the *Opera Nazionale*. The grants were made in two forms: part for the attainment of the purpose of assistance, by distribution among the provincial *patronati*, and part to be devoted to specific objects, attainable only though the central organization and therefore assigned to the central organization itself. In all, the grants for 1919 amounted to 2,349,444 liras, and for 1920 to 4,254,050 liras.

Besides the *Opera Nazionale* of which we have spoken, there is also the *Opera Nazionale* for civil and religious assistance of the orphan children

of those killed in the war. This was legally recognized by the Lieutenantcy Decree of 9 November 1916, for the purpose, according to its by-laws, of giving special assistance to the orphans of artisans, of the lower middle class in town and country, and of agriculturists remaining among their relatives. Part of its programme is the establishment of agricultural colonies, and it is therefore interesting to us. We must also mention the National Committee for War Orphans, legally established at the Ministry of the Interior, and the Industrial Foundation for War Orphans (1), bodies which understand the importance of the movement for agricultural colonies and facilitate it with adequate means.

§ 2. AGRICULTURAL COLONIES.

Among the specific objects of the *Opera Nazionale* for the orphans of peasants killed in the war, the formation of agricultural colonies has hitherto been the most important. Through these colonies the *Opera Nazionale* seeks to provide technical instruction for those war orphans who have no relatives to assist them, and have no means of learning to follow their fathers' occupation. The colonies should be constituted as farms worked by families; they should work with simple regulations under the guidance of a manager, or of a family of peasants. The orphans received should be given elementary teaching and learn practically "the art of working the fields, and carrying on in a rational manner all the agricultural industries possible in their villages "

The colonies should as a rule be under the supervision of the local provincial *patronato*, or directly under that of the *Opera Nazionale* if formed for a whole region. According to the original programme, the number of the colonies would have been sixteen, one for each region and each capable of receiving 50 orphans; this being presumably the number of really necessitous in any region. It was provided that, if necessary, consortia should be constituted among the provincial *patronati* concerned.

But in fact many provinces considered it necessary to form a colony of their own, and some even propose to establish two or three within their own territory.

The agricultural colonies naturally require a foundation capital, and a working capital, before they can begin operations.

The foundation capital, which may vary, according to the extent of the cultivable land, from 400,000 to 500,000 liras, may be obtained to a great extent from the Deposit and Loan Bank. This bank, indeed, by a Royal Decree of 2 September 1919, No. 1,660, was authorized to grant to the provinces loans up to 3,000,000 liras to be repaid in a period not exceeding 50 years, for the purchase of land and buildings, for constructing, enlarging and repairing buildings, and for establishing agricultural colonies. At the request of the *Opera Nazionale* the interest on the sums borrowed will be paid by the State.

(1) This foundation granted to agricultural colonies in 1920 the sum of 300,000 liras.

The working expenses may in part be covered by payments made on behalf of the orphans, by payments which may be made to the colonies by the provincial committees for war orphans and in part by contributions from local bodies (savings banks, communes, and other bodies) and from the *Opera Nazionale*.

It should also be pointed out that for the establishment and the successful working of the colonies most urgently needed, the Ministry of the Interior granted large financial contributions which in the year 1919 amounted to 500,000 liras. For 1920 for the same object another 500,000 liras was assigned to the central organization of the *Opera Nazionale*.

To these general indications we shall add some particulars about the chief agricultural colonies working in Italy.

Mantua. — The provincial agricultural colony of Foresto in the district of Volta Mantovana, founded in April 1916, was the first in Italy to begin working.

It arose through the initiative of the provincial administration, which placed at its disposal a farm of 37 hectares, and a sum of 100,000 liras, to which the communes and other public bodies contributed, and received legal recognition by Lieutenantcy Decree of 22 April 1917, No. 743.

Under the impulse given by its originator and founder, Prof. A. Dall'Aglio, one of the most active promoters of the formation of colonies of this kind, it steadily developed and it is hoped that soon the farm belonging to the institution will be in working order. When the colony was opened, fruit trees and vines were planted on land hitherto unproductive, which will help to increase the returns of the farm. The colony, which had 15 pupils in 1917, and 66 at the end of 1919, has a poultry-yard, stable, etc. besides the dwelling-house.

Those pupils who have not finished their school course are registered at the communal school; there is also a technical school attended by the older boys. Pupils above the age of 9 are employed in work adapted to their age and physique.

Up to 31 April 1920 the formation expenses of the colony amounted to 169,088 liras. The working expenses during the year 1919 were 70,693 liras, thus divided: ordinary management expenses, 15,914 liras; extraordinary management expenses, 1,759 liras; cost of maintenance of pupils, 50,303 liras; cost of instruction, 2,716 liras. The cost per orphan is calculated at 1,200 liras per annum.

Venice. — The colony was formed at Mira, on the initiative of the provincial *Patronato* for the orphan children of peasants. There are 60 orphans under its care (40 boys and 20 girls). It consists of some buildings and 23 hectares of excellent land, and, among other subjects, gives practical instruction in horticulture, fruit-growing and poultry-keeping. The programme of the day is varied; the time spent in each occupation is relatively short, with physical and mental labour, fatigue, rest and recreation alternately. To labour about 4 or 5 hours are devoted, to study and reading together 3 or 4 hours, to recreation about 2 hours on working days and on holidays 4 or 5; to daily and nightly rest about 9 hours.

The agricultural work, with domestic economy for the girls, is arranged according to the seasons.

Many institutions and munificent individuals have aided the *Patronato* to give the colony wider development and to perfect its organization.

Bologna. — The agricultural colony was established by the provincial administration with the help of all the communes of the province, which placed at its disposal 47 hectares of land in a healthy and pleasant locality. It has 70 orphans under its charge.

The agricultural instruction is given by two teachers, two gardeners, a cowman and the director.

Attached to the colony are a cow-shed with 14 dairy cows and two oxen for farm work, three pig-sties, a poultry-yard, rabbit hutches, a sheep-fold, bee-hives, an experimental garden, and an agricultural museum. The lessons are given in the open air.

For language, arithmetic, history, geography and moral education, the ministerial programme is followed, adapting it to the character of the school. For civil instruction the following subjects are added, labour associations, laws relating to the protection of labour and social insurance, the administrative and political vote. There is also a short programme of the rudiments of natural science.

On leaving the colony, each orphan receives a sum of about 2,000 lire as payment for work done.

The daily cost of an orphan is calculated at 5 liras.

On the whole, the working of this colony is excellent.

Reggio Emilia. — The agricultural colony is established near the *affittanza collettiva* of Santa Vittoria. It has a large experimental garden (about 2 hectares), and a school. The president of the *affittanza collettiva* is also manager of the colony. "Every effort," he writes, "must tend to inspire in the minds of the children that spirit which urges adult workers towards ever vaster forms of co-operation. The farm-school and the organization to which it belongs form the surroundings in which the children live, and to which they will conform themselves still more, when, having completed the popular school course, and no longer pupils, they become young workers."

At present there are 42 orphans in the institution.

Lucca. — The agricultural colony, which was formed in the commune of Mutigliano in June 1919, has at its disposal 20 hectares of land, including vineyards, olive groves and arable land, purchased, together with ample accommodation, for 275,000 lire, and receives 80 boys and 40 girls.

The agricultural instruction is imparted by means of experimental lectures, by a member of the agricultural commission under the direction of the itinerant agricultural lecturers. A peasant takes the boys to work and gives them instruction about the care of cattle. To each orphan, according to his physical capacity, is entrusted a certain piece of work, which he must punctually finish by himself. The duties are so alternated that while each one has his task, all have practice in the different kinds of work, whether on the land, in the stable or the poultry-yard. At the

end of the year prizes are given according to the work done and the industry displayed.

The cost of maintenance for each orphan is 5 liras per day.

Lecce. — This agricultural colony, formed on the initiative of the provincial *Patronato*, receives 60 orphans girls. It has 7 hectares of land with a vineyard, a kitchen-garden, a palm-grove, ample space for growing vegetables, cereals, and tobacco, with stables, rabbit hutches, a poultry-yard, etc. The agricultural instruction aims at forming good housewives; the girls keep silk-worms, make baskets and hampers, learn the most essential kinds of women's work, practice the grafting of vines, the cultivation of vegetables, grain and tobacco, and learn the first principles of hygiene and first aid.

In the province of Lecce, at Martina Franca and Corigliano d'Otranto, there are two other colonies, both founded by the *Patronato* for the orphan children of peasants.

The first of these receives 45 orphans; it has a farm of three hectares, with a rich plantation of American vines. The *Patronato* intends to have a cheese factory and a station for experiments in wine-making, so that the young peasants may specialize in the two chief agricultural industries of the district.

The second colony, that of Corigliano d'Otranto, receives 100 orphans, and comprises 36 hectares of land. It has 8 dairy and working cows, rabbit-hutches, a poultry-yard, a pigeon-house and beehives. The younger children are employed in gardening and the care of animals and flowers. The older children learn grafting and take part in field labour.

Caserta. — The *Opera Nazionale* for the orphan children of peasants founded at Sparanise in November 1920 a "village for little orphan children of peasants." It is a group of dwelling-houses, each capable of receiving 15 children; each house is under the care of a peasant woman. This "village" has 30 hectares of land; it has dairy cows and other domestic animals, and carries on bee-keeping and horticulture, hoping later to add all other suitable branches of agriculture.

The initial cost was over 400,000 lir. s. The *Opera Nazionale*, the Industrial Foundation of which we have already spoken and the Provincial Committee provide the cost of working and maintenance. The "village" can receive 85 children.

In the same province, at Alvito, is another colony, opened in October 1919, which receives 50 orphans and has at its disposal about 20 hectares of agricultural land.

Cosenza. — Founded on the initiative of the provincial *Patronato* in the comune of Dipignano, this colony can receive more than 100 orphans. It has an endowment for agricultural instruction. The province undertook the cost of equipment, to be defrayed by a loan from the Deposit and Loan Bank.

Sondrio. — This colony is near Chiavenna; it was founded by private individuals and recognized by a decree of the prefect in May 1918. A large and hygienic building receives orphans from 11 to 16 years of age.

Vineyards, meadows, corn fields, orchards and kitchen gardens are annexed to the school of practical agriculture. A teacher of agriculture with the requisite staff, gives daily experimental lessons, and assists the pupils in cultivation, that they may become experts in the raising of various crops as well as in cheese-making, the care of live stock, etc. The colony receives 40 orphans.

Vicenza. — The Victor Emmanuel III agricultural colony inaugurated in June 1918, is settled in a large villa in the commune of Lonigo, with a farm of about 125 *campi* (1). By Decree of September 1916 it received legal recognition. Its capital fund amounts to about 500,000 francs. A large number of fittings, machinery and agricultural requisites were gratuitously supplied by societies and private individuals. With this assistance, and under expert management, the colony works admirably. It receives 100 orphans for each of whom it spends in all 1,700 liras per annum.

Rome. — This colony is in the commune of Sezze. Attached to it is a model farm, devoted to various crops such as olives, vines, grain, leguminous plants and fruit, as well as to stock-breeding. The land measures 30 hectares in all. The buildings are worth 500,000 liras. The colony is under the management of the Director of the Itinerant Professorship of Agriculture, who gives practical instruction.

Verona. — This colony was founded by the provincial administration, which gave for the purpose of enlarging it the very considerable sum of 450,000 liras. It is annexed to the Practical School of Agriculture. The boys attend the public school for general instruction, and go by turns to the agricultural school. They do work adapted to their age and aptitude. The older boys are taught the selection of seeds, milling, distillation, etc. so as to form a trained body of men for whom there will in time be a demand.

Florence. — This colony, formed at Calenzano by the provincial *Patronato*, possesses about 10 hectares of land and receives 65 orphans. Besides work in the fields and in the house the children are taught some rural trades, such as rough carpentry, basket-making, making wooden shoes and similar trades.

Rovigo. — This colony, which was formed in the commune of Crespino, is due to the initiative of the provincial administration. It has a capital fund amounting to about 300,000 liras and receives 65 orphans.

There are more than 30 agricultural colonies now working in Italy. They have about 2,000 orphans under their care and hold cultivable land varying from 3 to 50 hectares in area. Besides those which we have described there are others at Villa St. Martin (Ravenna), Rocca di Falco (Palermo), Alba (Cuneo), Porto Recanati, Ferno (Milan), Benevento, Parma, Pesaro, Somma Vesuviana (Naples), Venafrò (Campobasso), Arco (Trent), Orsoleo (Potenza), Faenza, etc. Many other colonies in various localities are planned or are about to be formed on the initiative or with the direct co-operation of the respective provincial *Patronati*.

(1) A "campo" is a local measure equivalent to 3862.572 square metres.

The greater number of the colonies hitherto mentioned were formed, promoted or financed by the *Opera Nazionale* for the orphans of peasants killed in the war. To those may be added others due to private initiative, without the intervention of the *Opera Nazionale*.

In general they all have an immediate humanitarian object, but to this is added a practical and social aim, which is not only to ensure to the orphans technical agricultural instruction, otherwise unattainable by them, but also to check the much to be deplored tendency, intensified by the war, to migration from the country to the towns. The widows and orphans of the peasants, if left to themselves without assistance, would abandon the rural communes in the hope of finding help and shelter in city institutions, and thus withdraw living and youthful forces from agriculture, to the detriment of the national economy.

The provision which is contained in the by-laws of the *Opera Nazionale*, whereby when it has fulfilled its task towards the orphans of peasants killed in the war, it shall continue to exercise the same functions of help and protection towards the orphans of peasants in general, is thus timely and beneficent.

MISCELLANEOUS INFORMATION RELATING TO THE CONDITIONS OF THE AGRICULTURAL CLASSES.

HOLLAND.

THE INCREASE OF AGRICULTURAL WAGES FROM 1913 TO 1919. — *VERSLAGEN EN MEDEDEELINGEN VAN DE DIRECTIE VAN DEN LANDBOUW (Reports and Communications of the Office of Agriculture). The Hague, 1921, No. 1.*

Statistics of agricultural wages for the whole of Holland are not available. For the province of Groningen the following figures have been compiled :

Increase of Agricultural Wages in the Province of Groningen from 1913 to 1919.

Year	Annual wages of an agricultural labourer at Uithuizermeeden		Amount of wages paid per hectare on a farm in Oldambt		Amount of wages paid per hectare on another farm at Oldambt		Index number showing average increase
	Amount of wages	Index number showing increase	Amount of wages	Index number showing increase	Amount of wages	Index number showing increase	
	Florins		Florins		Florins		
1913	535.99	100	80.17	100	73.65	100	100
1914	571.62	107	81.18	101	79.43	108	105
1915	619.12	116	83.13	104	—	—	110
1916	798.16	149	102.99	127	98.00	133	136
1917	853.20	159	133.04	166	110.24	150	158
1918	1082.29	202	165.57	207	150.13	215	208
1919	1264.63	236	203.06	253	188.89	256	248

From figures supplied by 13 farms of different kinds in the other provinces, it has been calculated that wages have increased between 1914 and 1919 in the proportion of 100 to 220.

POLAND.

THE WAGES OF AGRICULTURAL LABOURERS IN OCTOBER 1920. — *Revue mensuelle du travail*, published by the Central Statistics Office of the Polish Republic, Warsaw, January 1921.

The average daily wages of agricultural labourers, expressed in Polish marks, in October 1920 were as follow :

Provinces and Departments		Adults		Young persons	
		Men	Women	Boys	Girls
Former Russian Poland Galicia	Dep. of Warsaw	100.50	63.12	51.25	48.75
	Dep. of Lodz	91.66	75.00	55.00	46.66
	Dep. of Kielce	57.25	43.25	30.00	29.00
	Dep. of Lublin	125.83	81.66	70.00	50.00
	Dep. of Białystok	100.00	66.66	52.50	37.50
	East Galicia	75.75	52.50	38.75	36.52
	West Galicia	64.58	46.00	37.72	37.50

II. — LAND SYSTEMS

PARAGUAY.

LAND SETTLEMENT.

OFFICIAL SOURCES :

INFORME DE LA DIRECCIÓN DE INMIGRACIÓN Y COLONIZACIÓN PRESENTADO AL MINISTERIO DE RELACIONES EXTERIORES CON ANEXOS SOBRE VARIOS PROYECTOS RELATIVOS A LA COLONIZACIÓN Y PROPAGANDA. Asunción, 1906.

MENSAJE DEL PRESIDENTE DE LA REPÚBLICA DEL PARAGUAY. Asunción, April 1920.

Boletín de la Dirección de Tierras y Colonias, 1st Year, No. 2. Asunción, December 1920.

Diario Oficial de la República del Paraguay. Asunción, 5 October, 1918.

OTHER SOURCES :

VON FISCHER-TRENCHELD (R.) : *Le Paraguay décrit et illustré*. Brussels, 1906.

CONCURRENCIA DEL BANCO AGRÍCOLA DEL PARAGUAY A LA EXPOSICIÓN INTERNACIONAL DE AGRICULTURA DE BUENOS AIRES EN EL CENTENARIO DE LA REVOLUCIÓN DE MAYO 1911. Asunción.

INFORME SOBRE LA REPÚBLICA DEL PARAGUAY. Madrid, 1913.

The Republic of Paraguay, situated in the central part of South America and bordering on the north and east with Brazil, on the south, south-east and south-west with Argentina, and on the north and north-west with Bolivia, is one of the most flourishing countries of that vast continent. The problem of colonization, from both the economic and the agricultural point of view, has there found, more particularly as the result of the effective measures taken by the Government, the way to as speedy a solution as possible.

Certainly much can and must still be done, in view of the immensity of the territory and the sparseness of the population, which has a density of barely 5 inhabitants per square kilometre, but the cultivated areas are steadily being extended, agricultural production increases from year to year and the existing colonies become more prosperous. From these indications it may be presumed that an assiduous work of colonization adequately organized, will doubtless succeed in fully developing the potential wealth of this most fertile country.

§ 1. NOTES ON THE AGRICULTURAL, ECONOMIC CONDITIONS OF PARAGUAY.

The Republic is divided into two great regions, the eastern and the western, by the River Paraguay, which traverses its entire length. The eastern part, known under the name of the Paraguayan Chaco, is rich in immense forests and vast tracts of pasture land. It is inhabited for the most part by indigenous tribes, who are docile, sober and industrious, and are therefore capable of acquiring civilization. They devote themselves principally to the cultivation of cotton, manioc and potatoes and to the working of the forests. The western region, watered by the numerous rivers and streams which descend from the great chain of mountains separating the two great basins of the Paraná and the Paraguay and forming in themselves a magnificent natural system of irrigation, is inhabited by the real population of the Republic. The soil of this region is so fertile that not infrequently two crops can be gathered in one year. Here is found the capital, Asunción, one of the most beautiful cities of South America and a great commercial emporium, to the port of which come vessels laden with goods from all parts of the world.

Population. — The population has fluctuated according to the historical vicissitudes of the Republic; in 1852 it amounted to 300,000 inhabitants, of whom 12,000 were found in the capital; nine years later, in 1861, the number of inhabitants reached 1,300,000. But in 1865 an immense number of men perished in the appalling war against Brazil, Argentina and Uruguay and according to exact calculations made in 1872, out of a million inhabitants, only 231,000 remained, of whom 31,296 were foreigners. Immigration at that time was so insignificant that it only contributed in a very small measure to the repopulation of the country. The census of 1886 showed the population of Paraguay to be 263,751. Since this date the population has increased every year; in 1911 it reached 800,000 inhabitants, and at the present time it exceeds a million.

Climate. — The climate of Paraguay is not excessively hot, as is commonly believed; the maximum temperature is not even as high as it usually is in some European countries, since it rarely attains to 37 degrees centigrade. The summer is temperate on account of the abundant rains, the winds and the coolness derived from the extensive wooded regions; the winter is almost uniformly spring-like.

Principal Crops. — One of the principal crops grown in the Republic is tobacco. It has been cultivated since the 18th century and from that time its development has been such that tobacco is the principal article of export from Paraguay. The departments of Cordillera and Villarica, the soil of which is specially suitable for this crop, are the most productive in the Republic. The department of Cango produces a highly prized variety of tobacco known as *retorcida*, which forms the principal source of wealth of all that great region.

Cotton and maté also occupy an important place amongst the crops cultivated in Paraguay. The immense forests, too, are real sources of wealth on account of the excellent woods which can be obtained from them. Some of these are being worked but others are as yet untouched owing to the want of convenient, economic and rapid means of transport.

Some land is devoted to fruit-growing and its produce finds its way to the most distant markets of Europe. Olives, coffee, sugar-cane, wheat, flax, barley, rice, vanilla, cinnamon, etc., are also produced in considerable quantities.

Stock Breeding. — This industry, which has been carried on in Paraguay since 1550, increased rapidly owing to the favourable conditions, the land of Paraguay being rich in pasture and adapted to the formation of stock farms. In 1911 the production was so much in excess of the needs of the inhabitants of the country that it became urgent to seek markets in Europe and to adopt remunerative methods of handling meat, such as salting, canning and preserving.

Industries Subsidiary to Agriculture. — Industries in general do not show that development which they might have, considering the natural resources of the Republic; they are, however, steadily progressing in proportion to the increase of labour and of capital.

Large undertakings exist for the exploitation of *quebracho* and the extraction of tannin; these are veritable centres of labour, wealth and progress. They occupy an extensive region, traversed by a long line of railway which links the undertakings together and opens up a huge area of unoccupied land and, at the same time, enables very rich lands, which were formerly unexplored, to become productive.

Other important industries are sugar-refining and brewing.

Lastly we may note that Paraguay is rich in minerals, which are found in various regions, in a workable form and always in the neighbourhood of rivers.

§ 2. THE FIRST AGRICULTURAL COLONIES OF PARAGUAY.

In view of the excellent natural conditions of Paraguay in regard to agricultural production, which we have noted in the preceding section, it is not surprising that for a long time efforts have been made to encourage colonization and immigration, and that colonies have been formed in the places best suited for settlement.

Even before the Laws of 30 September 1903 and 24 June 1904 laid down rules for the regulation of immigration and colonization, several colonies had already been formed in the Republic, and of these we think it desirable to give a brief account.

Hoenaú Colony. — This colony, which is one of the best organized in the Republic, is situated on the banks of the Upper Paraná, in the department of Jesús y Trinidad. The first immigrants were settled there in 1900 and began to construct roads, houses, schools, etc., in a district almost entirely covered with woods. The colonists devote themselves particularly to the cultivation of maize, maté, vines and wheat.

The colony has its own river fort, which communicates with Jesús y Trinidad and with Encarnación. It contains offices, institutions, industrial undertakings, a branch of the Agricultural Bank, and several sugar refineries and mills for the grinding of wheat and maize.

The 24th of November Colony. — This colony was founded in 1893 in the department of Ajos and is rich in pasture land and forests. More than a thousand families are settled in the colony, and each family occupies a lot of 16 hectares, or a half-lot of 8 hectares, according to the number of persons of whom it consists. The principal crops cultivated are maize, manioc, sugar-cane, rice, tobacco and cotton. Although far from the commercial centres the colony has made remarkable progress since its foundation.

Nueva Germania Colony. — This colony was founded in July 1887 in the department of Villa de San Pedro, and is joined to the capital by a convenient line of railway. The crops cultivated are much the same as those cultivated in the other colonies described.

Cosme Colony. — Founded in 1896 by a well-known Australian, who went to Paraguay inspired by novel ideas, this colony rests on a purely co-operative basis. The land is not divided into lots; the agricultural and industrial work and the production are carried on by the community. Each person has a right for his maintenance to a weekly remuneration varying according to his age, viz. 13 pesos from 15 years upwards; 9.75 pesos between 10 and 15 years, 6.50 pesos between 5 and 10 years and 3.25 pesos from 1 to 5 years.

Out of the returns from the sale of the produce the colonists are paid weekly what is due to them, the balance being devoted to the purchase of cattle, which are considered as the property of the association. In regard to cultivation, this colony may be likened to an immense garden, in which the flowers and fruit which grow in abundance are mingled with sugar-cane, maize and other important products of the district.

Gaboio Colony. — This colony was founded in 1901. It is divided into two parts by the river Tatucúa which traverses it from north to south. The first of these parts is subdivided into lots and devoted to agriculture; the second is reserved exclusively for the dwellings of the settlers. The land is not specially suitable for agriculture and is at the mercy of river floods. The colony has, however, forests rich in valuable woods and has lands which are well adapted for stock breeding.

Trinacria Colony. — This colony is situated in the department of Villa del Rosario. Agriculture, fruit-growing and stock-breeding are making appreciable progress. The principal crops cultivated are manioca, maize and tobacco.

Nueva Australia Colony. — This colony is in the department of Ajos. The principal products are manioca, maize, various kinds of woods, and fruit.

Elisa Colony. — This colony is in the department of Sant'Antonio. It was founded in 1890 and produces manioca, maize and lucerne. It is rich in fruit-trees, being situated on the River Paraguay at a short distance from the capital, it has easy means of communication, and exports annually to the markets of the River Plate considerable quantities of tangerines, bananas, pine-apples, oranges and other fruits.

Nueva Italia Colony. — This was the first model colony formed by the Colonization Office. It is in the department of Villeta, at a very short distance from the capital and the River Paraguay, which facilitates its communications with the principal centres of the Republic.

It is divided into three sections, each of which is subdivided into agricultural lots of 16 hectares. Each section has pasture land which serves for the whole community. The Government grants a lot of 16 hectares to each colonist, giving him a definite title only after three years of residence in the colony and after he has planted a certain number of fruit trees. Having obtained one lot, the colonist may apply for a second lot of the same area, which he can obtain at the price of 20 pesos per hectare. If on the first lot acquired the colonist has planted and maintained three times as many fruit trees as the law require, he will have the right to obtain a second lot of 16 hectares gratuitously.

The land of this colony is suitable for all kinds of cultivation, particularly that of fruit; it is, moreover, rich in pasture. The Government, foreseeing the utility which the creation of a centre for the production of fruit for export would have for the country, imposed as a special condition for the acquisition of lots in this colony the planting of 1,000 fruit trees.

§ 3. IMMIGRATION LAWS.

Paraguay, then, is a country eminently suited to the growing of a great variety of crops, but containing a very scanty population. It is not surprising, therefore, that the first care of the Government has been to encourage immigration by means of special laws. Of these laws we shall now give a brief account.

The first Immigration Law dates back to 1903. For the purposes of this law every able-bodied foreigner less than 50 years old who comes to the Republic to settle in it is regarded as an immigrant. He must prove, by means of certificates furnished by the consuls or emigration agents of Paraguay in foreign countries, his good moral character and his capability as an agriculturist or as a mechanical or industrial worker. The law authorizes the Government specially to encourage whatever class of immigrants it

deems most desirable and to restrain immigration by appropriate measures whenever it may become excessive in view of the economic condition of the country.

The immigrant with no family, who comes to Paraguay on his own account with an effective capital of 50 pesos gold, or the immigrant who, having a family, has a capital of 20 pesos gold for each male child, is allowed a free voyage, second class, from any point of the River Plate or of the Paraná to his place of destination and has the right to disembark with all his effects, whether in the nature of clothing or of the instruments of labour, at the expense of the Immigration Office, no individual or private undertaking being allowed under pain of fine to arrange for his disembarkation without the previous authorization of that office. The immigrant has also the right to be lodged and maintained at the expense of the nation during the eight days following his disembarkation and if he become ill during that period, until his complete recovery. At the end of the eight days, except in the cases of immigrants with whom the nation has made contracts on behalf of its colonies, these being lodged and maintained gratuitously until the day they arrive at their destination, the immigrant is obliged to pay a special daily contribution amounting to 0.40 pesos gold for immigrants who are over 10 years of age and to 0.20 pesos gold for those who have not yet reached that age.

The law further determines that each immigrant has the right to introduce into the Republic, free from any customs duty, in addition to effects for personal and domestic use, seeds, all kinds of machinery, agricultural and industrial implements, tools required for labour, pure-bred animals, etc., up to a value to be fixed by the Government. After the arrival of the immigrant in the Republic the expenses of transport to the place where he will fix his abode are at the charge of the State, provided always, however, that that place is situated on a railway line or on a river, and that there are facilities of transport to it. The immigrant has also the right to gratuitous assistance on the part of the Immigration Office and of its agents in obtaining all the information which he may require and in making hiring agreements.

Those immigrants who are over 50 years of age, who are disabled or are incapable of working on account of loss of limb or some physical defect, also enjoy the advantages above described with the exception of the gratuitous assistance of the Immigration Office in making agreements. It is a necessary condition, however, that they should belong to a family in which there are at least two able-bodied persons, who, within the meaning of the law, may be considered as immigrants and are already settled in the country with means sufficient for their subsistence.

The free voyage, second class, and the exemption from payment for the transport of the personal effects which the immigrant brings with him, are also granted to any immigrant who may be engaged by private undertakings, or may be summoned to the Republic by his own family who are already settled there. In these cases it is not required that the immigrant should possess the minimum capital required in other cases by the law.

For no reason may the immigrants take advantage of the facilities above described for the purpose of going from one part to another of the territory of the Republic under pain of having to indemnify the General Immigration Office for all the expense which it may have incurred on this account. Paraguayans who desire to return to their country to settle there are allowed the same facilities which are granted to immigrants.

The Law of 22 January 1920, N° 380, gives a list of the documents with which each immigrant must be furnished. These documents must testify to his moral character, his conditions of health, his capacity as an agriculturist, as a mechanical or industrial worker, etc.

In order that all State action with regard to immigration may be carried out on uniform principles the Law of 13 June 1920 lays down the rules which regulate that service, which is entrusted to a special Immigration Section of the Department of Lands and Colonies.

This Section will have the following duties :

(a) To compile statistics of immigration regarding all the colonies which exist or which may be formed in the Republic, showing the number and the classes of immigrants who settle in them ;

(b) To arrange favourable conditions for the hiring of the immigrants according to the kind of work for which they are suited ;

(c) To register the number of hirings showing the day, the nature of the work, the conditions of the agreement, and the number of persons hired ;

(d) To arrange for the disembarkation of immigrants and to help them to settle in the national colonies.

(e) To register the applications for artisans and labourers ;

(f) Periodically to inspect the official and private colonies established in the country ;

(g) To assist the foreign settlers in any actions taken by them before the authorities of the Republic in respect of failures to fulfil the terms of hiring agreements ;

(h) To carry out superior orders and instructions.

The propagandist agent has the duty of making an extensive propaganda in favour of immigration, making known the colony system, the advantages offered to immigrants, the facilities for acquiring State lands, etc. He must also testify to the character and capacity of each immigrant, and report quarterly to the Department of Lands and Colonies regarding the number and classes of immigrants sent, as well as the causes of any increase or diminution in their number and record all action taken regarding them.

The Decree further lays down what are the functions of the manager of the " Immigration Hostel " in which the immigrants are lodged on their arrival. He must personally direct the official and gratuitous disembarkation of the immigrants, accompany them to the Hostel, note their names in a special register indicating their nationality, the place from which they have come, the name of the steamer, the date of their arrival, their destination, the length of their stay, etc.

If the immigrant, after he has been admitted to the Hostel, leaves it of his own will, the Immigration Office has no obligation to furnish him with lodging beyond the days fixed by the law.

Having thus examined the rules laid down by the law for regulating the influx of immigrants, we will now examine the measures taken for promoting on a steadily increasing scale the colonization of the land which, as we have seen, is eminently suited for a large and profitable development of agriculture.

§ 4. THE COLONIZATION LAW.

The law which contains all the rules for colonization dates back to 1904, and, except for slight modifications, which we will indicate, has remained unchanged until the present time.

As we have seen, even before the law on colonization was promulgated, colonies had been established in Paraguay with a special technical agricultural organization, and it is not improbable that in laying down general rules for encouraging land settlement on a larger scale the legislature had in mind the results already obtained by the existing colonies. The Law of 1904 authorizes the Government to establish agricultural and pastoral colonies at different points in the Republic choosing suitable lands preferably near railways or navigable rivers. Such colonies may be formed either on public lands or on lands acquired for that purpose from private individuals after technical inspection and approval by the Ministry in agreement with the General Immigration and Colonization Office. The stock-breeding, industrial or agricultural undertakings, the existing buildings and the land strictly necessary for their maintenance, which are situated in the lands set aside for the formation of the colony will not be considered as forming part of the colony itself.

The Law lays down that lands belonging to private individuals, which may be set aside for the formation of colonies, may be converted into public lands or expropriated for the better organization of the settlements and colonies to which the law itself refers. Expropriation must be made on the basis of the estimated value of the land plus 10 per cent.

All the public lands in the Republic may be devoted to national colonization and will remain subject to the exclusive jurisdiction of the Ministry of Foreign Affairs.

Area and Division of the Lands. — The land on which the colony is to be founded having been decided upon, the next step is to survey it and to mark out the boundaries, and the land is then divided into lots, leaving free in the centre of each lot, at the most suitable point, an area on which to erect houses for the settlers.

These areas are then in turn subdivided into sections, and each section into plots of building land of 50-square metres in area. These plots are indivisible in case of succession, sale, or transfer of any other kind.

The lots into which the agricultural lands are divided, and the half-lots, into which they may be subdivided, must not be larger than 200

hectares, nor smaller than 12 hectares, according to the nature of the land.

In the pastoral colonies the lots must be 4 square kilometres in area and in these also areas must be left free for the erection of dwelling houses.

The Law also lays down special rules regarding the construction of the buildings on the various lots. It provides, amongst other things, that a free space must be left in front of the dwelling houses and that that space must be planted with trees.

Grants of Uncultivated Lands. — The general plan of the lands to be settled having been drawn up, the Government must, according to the Law, give public notice of the uncultivated lands comprised in the plan, placing them at the disposal of those who desire to cultivate them according to the terms of the Law.

Any person, whether a native of Paraguay or a foreigner, who does not own any rural landed property in the country, may apply for possession of a lot of rural land, and on payment of 5 pesos will be given a provisional title.

An applicant who has no family will be granted a half lot and the other half will be reserved for him and will be granted to him if he forms a family or acquires citizenship within two years from the grant of the first half of the lot. If two years pass without the applicant having acquired the second half of the lot, it may be granted to another person, and the holder of the first half may eventually complete his lot with other land in the same locality for which there has been no application.

The settler who has the right to acquire lots in one agricultural centre, cannot obtain lots in another centre, unless he expressly renounces that right. In each colony one or more lots must be set aside for use in common by the whole population as grazing for stock. Each family will have the right to graze 25 head of cattle or horses, and 40 head of small stock.

With the object of promoting more intense cultivation in the colonies the Law provides that a free grant of a second lot may be made to any family which, within a period of two years from its entry into the colony, has cultivated and sown the entire area of one lot.

Grants of Occupied Land. — The Law contains special provisions for the granting of lots already occupied by settlers in the lands which are set aside for the formation of colonies. The Law substantially respects the rights of those who already occupied the lots, but provides that the title of the first occupier must be respected.

To the person or family who may be found to be occupying land within the area set aside for the formation of a colony or for the enlargement of a town, a provisional certificate of occupancy will be given.

The Law defines an occupier as a person who, at the time when the land is divided into lots, has on the land a building and at least 25 fruit trees or bushes and has enclosed and cultivated an area of at least 3 hectares. Between two persons occupying the same lot, preference is given to the first occupier. In case of doubt as to which is the first occupier, the grant will be made to the person who has made the greatest number of improvements. The person to whom the lot has not been granted,

because he has not been recognized as the first occupier, will be allowed a year within which to leave the lot, and will have the right, as an occupier, to acquire possession of the nearest rural lot or of any other available lot which he may choose in the same locality.

Pastoral Colonies and Settlement of Indians. — The Law also contains a special section relating to pastoral colonies, which must be established only on public lands not suitable for agriculture. The formation of these colonies is subject to the following rules:

Any person who has attained his majority and is not the owner of any rural land, has the right to acquire a pastoral lot, subject to the obligation to stock it, within five years, with 300 head of cattle, 150 mules and 600 sheep and to erect a dwelling house and out-houses. The price payable for the lot will be 10,000 pesos if it is situated on public lands, or the cost price, including the cost of surveying, if it is situated on private lands acquired by the State under the terms of the Law. The price must be paid by equal annual instalments within a period not exceeding five years. If the conditions of the Law are not complied with, the grant will be declared void.

The Law further authorizes the Government to provide for bettering the conditions of the indigenous tribes and for their settlement by grants of land and of the means of working it.

The public lands not occupied by colonies and by Indians may be let for stock breeding, on condition that the letting agreement may be cancelled whenever the Government deems it opportune to set aside the lands for purposes of colonization or to place them at the disposal of the public administration. In such cases, the tenant must give up the land within six months and will have no right to compensation.

Registration of Title. — Definite title to a lot will not be given, until the occupier has been formally certified to be such, has taken regular possession of the lot and has worked it for five consecutive years.

Agricultural lots are not freely granted to settlers, but are sold to them at a special price fixed by the Law of 10 April 1900 at 2 pesos per *cuadra cuadrada* (1) if the area of the lot does not exceed 50 *cuadras cuadradas* and it is on public land, and at cost price, plus the cost of surveying, if the lot is on private lands acquired by the State for the purpose of colonization.

The settlers may pay the price of the land within a period of five years, during which they must pay the ordinary bank rate of interest. They may pay in advance the last three annual instalments and in this case the payment of interest will be remitted.

If the grantees of rural lots do not complete the payment within five years, the Government may, if the default is due to *force majeure*, prolong the period for at most five years, provided application for the prolongation has been made and the grantee pays an annual fee of 10 pesos. The Government has, however, the right, on its own authority to declare the

(1) A *cuadra cuadrada* is equal to 7,301 square metres.

grant void, the lot reverting to the public domain. In such case the grantee loses the right to apply subsequently for other lots.

The settler cannot sell, mortgage, renounce or transfer in any manner whatever, except to his legitimate heirs at his decease, the provisional title or right of possession of lands to which the Law relates, under pain of rendering the title itself absolutely void. The lands granted under the provisions of the Law are not subject to distraint nor to seizure in respect of any obligations or debts incurred by the possessor before or during the period of the provisional title.

Administration of the Colonies. — Special rules are laid down for the administration of the colonies by the State.

The national colonies are administered by a special Commissioner whose duty it is to maintain order among the inhabitants and to settle the small disputes which may arise between the settlers.

Each Commissioner has the same powers, duties, jurisdiction, etc., as a Justice of the Peace within the territory of the colony.

When the colony has been formed, a building must be erected large enough to contain offices for the administration, provisional accommodation for the settlers, and storage for implements, food, etc.

In each colony a school must be opened in which the teaching shall be chiefly in the theory and practice of agriculture. For this purpose an agricultural experiment station must be attached to each school under the direction of agricultural experts or other competent persons.

Property acquired will not be subject to taxation during the first 5 years from the date of registration.

Private Colonization. — The Government has power to accept lands freely offered to it by private individuals for the purpose of colonization and to incorporate private colonies in the national colonies. In order that such incorporation may be effected it is necessary that the colony should be situated on land belonging to the individual or company carrying out the colonization scheme.

Private colonies incorporated in the national colonies will only enjoy the following advantages: (1) free travelling for the immigrants who are going to those colonies; (2) free survey and division of the land set aside for the colonies; (3) exemption from direct taxation for five years; (4) freedom to import personal effects, furniture, domestic utensils, machinery of all kinds, and implements for use in industry or agriculture, etc.

Such colonies will be subject to the supervision of the General Immigration and Colonization Office and their owners will be obliged to pay caution money to the Government which will go to the Treasury in case of non-fulfilment of the engagements entered into.

The Government is forbidden to make free grants of public lands or to let or sell them to individuals, companies or firms for the purposes of private colonization.

Colonization companies or undertakings must not settle as colonists immigrants who arrive in the district without carrying out the provisions of the Immigration Law.

In no case may colonization companies or undertakings transfer, alienate or mortgage lands granted to them to any foreign government or state, nor put themselves under its protection, nor admit it as a partner in the undertaking under pain of having the grant annulled.

The Colonization Law contains various general provisions by which it is determined, amongst other things, what lands may not be sold for the formation of colonies, these including a certain number of public lands on which maté is cultivated, lands bordering on navigable rivers and lakes, lands which may be necessary to the state administration and to the communal administration for the construction of roads, and land containing minerals.

As to the colonies themselves, the general provisions of the law prescribe that provisional occupiers of lots must not make use of the woods existing on the lots until they have obtained a definite title to the land. Exception is made in the case of the clearing of wooded lands which may be necessary for cultivation and for the felling of woods by the settlers for the purpose of providing themselves with wood for the construction of dwelling-houses and for agricultural purposes.

The succession of the colonist who dies without having fulfilled the conditions prescribed for the acquisition of the property is also regulated. In such cases the property will pass to his legitimate heirs with the same obligations by which the deceased was bound. Where there are no legitimate heirs, and when the lot of land is voluntarily abandoned, or the grant is annulled, the lot will be considered vacant and the subsequent occupier will benefit without any corresponding payment by the buildings, improvements and crops thereon.

Lastly, there are special provisions, completed by a subsequent decree of 16 July 1916, regarding superfluous public lands incorporated in private property set aside for the formation of colonies.

§ 5. SPECIAL RULES FOR THE SETTLEMENT OF THE NATIVES IN COLONIES.

As we have stated, the Colonization Law of 1904 states in general terms that the Government must provide for bettering the conditions of the indigenous tribes and their settlement by means of grants of land and of the means of working it. This general provision, the object of which was to transform the natives who have never worked on the land into cultivators and farmers, has since been developed and completed by a subsequent Law, that of 7 September 1909, by which more precise rules were laid down.

As appears from the regulations issued for the carrying out of that Law, individuals and companies may obtain the grants of tracts of public land of not more than 7,500 hectares in order to settle on them tribes or groups of natives for purposes of colonization. The survey and division of such lands will be carried out by the State, which must reserve a part of them for urban buildings, that is, for dwellings for the staff, schools, churches, hospitals, etc.

At first the uncultivated lands are placed at the disposal of the community in such manner, however, that the existing woods shall not be destroyed, and provided always that on those lands there are no families already regularly settled. A part of the land forming the lot must be reserved for common use, and more particularly for instruction in the practice of agriculture for those native families to whom the lots assigned to them cannot be handed over until they show that they have learnt the elements of agricultural work.

A native family will have reached the degree of agricultural training contemplated by the law when it has built its own house or has begun to cultivate its own land, or carries on a trade or industry in any of the centres of the colony. In such cases the native family will receive a provisional title to the lot assigned to it. After five years of residence in the colony, the native family will have the right to a definite title and this will be delivered to them by the Government.

Fiscal privileges are given to firms or companies which establish colonies for natives, and there are special clauses regulating the administration of the colonies, providing for the opening of schools, making education compulsory, prohibiting the alienation of the land, etc.

§ 6. AMENDMENTS TO THE COLONIZATION LAW OF 1904.

The Law of 1904 is still the fundamental law regarding colonization in Paraguay, only very slight modifications and additions having been made.

Amongst the subsequent measures worthy of note we may mention the Decree of 5 April 1918, No. 7,847, which lays down special rules regarding the sale of public lands which have an area less than that prescribed by the law for the formation of colonies. In regard to such lands the Decree lays down that substantially the same procedure shall be followed as that fixed by the law for the sale of public lands which fulfil the required conditions for the formation of a colony, but limits the area of land which may be granted to 20 hectares if the applicant has a family, and to 10 hectares if he has not.

A subsequent Decree, that of 13 September 1919, No. 10,522, lays down with greater precision the powers and duties of administrators of colonies already determined by the law; it imposes on them the preparation of special elaborate annual statistics showing the progress of the colonies and the variations in their population whether in regard to the existing crops, or in regard to the increase or decrease in the number of settlers in relation to births, marriages and deaths.

Even more important is the Decree of 26 September 1919, No. 10,579, which lays down rules for regulating private colonization.

It is provided in the first place by the Decree that whoever either in his own name, or as representing an undertaking, wishes to form a colony on privately-owned land, must present a regular application to the Department of Lands and Colonies showing the area of the lands to be colon-

ized, their boundaries, their situation, the nature of the colony to be formed (whether, that is, it is to be pastoral, agricultural or mixed), the wages and conditions which will be fixed in the agreements with the settlers, the occupation and nationality of the immigrants and the places from which they come, and the engagement to maintain them until their settlement in the colony. In the application the title to the property must be shown, as well as the plan of colonization which must be submitted to the inspection and approval, of the National Department of Engineers. When the project has been approved by the Ministry of Finance it will be transmitted to the Department of Lands and Colonies for inscription in a special register.

The landowner or other person who may have obtained authorization to form a colony can benefit in regard to foreign settlers by the advantages granted to immigrants by the Immigration Law of 1903 and the Colonization Law of 1904.

Individuals or companies who have the management of private colonies and apply to have them brought under the régime of official colonies, in order to benefit by the advantages of such colonies, including the survey and division of the lands by the Government, must make a special application and give security to the amount 10,000 pesos, in the form either of a cash deposit in the Agricultural Bank or of a mortgage, for the exact fulfilment of the agreed conditions.

Such colonies must not exceed 400 hectares in area if they are devoted to stock breeding or to agriculture and stock breeding, or 40 hectares if they are purely agricultural.

If within a period of one year, which may be prolonged in cases of unavoidable delay, the settlement of the agricultural colonists to a number which may vary from 20 to 40 families according to the area of land set aside for each colony has not been begun, the authorization which has been granted will be annulled. The agreements which may have been made with the colonists already settled on them will, however, be respected.

A private colony on which 100 colonists have been settled and supplied with houses and farms will have the right to have a commissary of police, a registrar, and a rural school as soon as there is such a number of children as to provide the school with 50 scholars between the ages of 5 and 14 years.

Lastly, the Decree of 14 August 1920, No. 12,172, fixes the specific conditions to be observed by the settlers during the period of provisional occupation and regulates the definite assignment and registration of the lots.

According to the Decree the occupant of a lot has the following duties : He must take possession of the lot within two months from the day on which the grant is made to him ; he must begin the work of cultivation within the same period ; he must maintain in such condition that traffic can pass a part of the land reserved for the public road which borders on his lot ; he must build a dwelling-house within a period of six months and plant in front of the house a line of trees 5 metres apart within two

years from the date on which he receives the provisional title, etc.

The provisional occupier must not oppose the extraction of stones, sand, or any other material found in the lot, nor to the cutting of wood, should the interests of the community require it.

Every year in the second fortnight of November he must present to the administration of the Colony particulars regarding the number of stock-breeding farms, the various plantations and the improvements made on the lot.

When he has received the definite title he must occupy the lot personally for five consecutive years and fulfil the following conditions:

(a) Keep under cultivation at least one hectare of manioc, three hectares under various crops, and grow at least 10 fruit trees for each hectare.

(b) Have 300 maté bushes in full growth and planted at a distance of at least $2\frac{1}{2}$ metres apart.

(c) Keep three hectares planted with bananas 3 metres apart, or an equal area under sugar cane.

(d) Have 5,000 pine apple plants at least 50 centimetres apart, or 200 orange trees at least six metres apart.

All the wood of commercial value in the rural zone of a colony is the property of the Treasury which may, if necessary, employ it for the development of the colony or sell it by auction according to the law dealing with the matter.

Each settler may graze in the common fields of the colony not more than 25 head of cattle.

A widow cannot occupy or acquire an entire lot if she has not at least one son over the age of 15 years.

The sons of settlers at the age of 18 years will have the right to occupy in the colony land of an area corresponding to half a lot.

The Decree also lays down rules concerning the area of the urban part of each colony.

As to the delivery of the provisional title and the definite title the Decree provides that when five years have passed since the lot was first occupied and all the conditions required by the law have been complied with the grantee can present the provisional title to the administrator of the colony in order that it may be definitely registered.

The administrator must ascertain on the spot the improvements made by the occupier in regard to dwelling-houses and crops and report on the matter to the Department of Lands and Colonies which will give the occupier the definite title in order that he may be inscribed as a citizen of Paraguay in the National Civic Register and in the Military Register or as a foreigner in the electoral roll of foreigners.

§ 7. FREE GRANTS OF PUBLIC LANDS FOR THE CREATION OF HOMESTEADS.

The various provisions which we have outlined for colonization in Paraguay are completed by the Law of 5 October 1918, No. 309, whereby the Government is authorized to grant parcels of public land on condition that homesteads shall be created thereon.

The grant will be made gratuitously to whoever applies for it provided he is not already the owner of urban or rural land. The parcel granted must not exceed 10 hectares in Eastern Paraguay or 20 hectares in Western Paraguay. This provision regarding the different area of the lands granted according as they are situated in the eastern or western part of the Republic has its reason in the fact that the western lands are, as we noted at the beginning of this article, largely unexplored and inhabited by Indians and the need to populate them is accordingly more urgent.

In the law in question the agreement creating the homestead contains the following conditions :

(a) The property must not be let, nor sold, nor arbitrarily abandoned, nor transferred except in case of succession.

(b) It is not subject to distraint or seizure on account of debts incurred or pledges given by the owner either before or after the acquisition of the land.

(c) In case of separation of husband and wife it remains the property of the party on whom falls the maintenance of the children.

(d) In case of the death of either husband or wife it remains the property of the survivor.

(e) In case of the death of both husband and wife it remains the property of the children and other heirs.

According to the law the person who acquires a homestead must, within the first two years from the date of acquisition, construct a dwelling-house for himself and his family on the land acquired and must bring the land under cultivation to such an extent and on such conditions as the Government shall determine for each district. The failure to carry out these conditions results in loss of the right of acquisition and the right to a definite title to the land.

Applications for grants of land must be made personally, or by a representative, to the Department of Lands and Colonies which, after having ascertained that the prescribed conditions have been fulfilled, delivers a title which is exempt from stamp duty and which, when registered in the Cadastral Survey Office, becomes a public document.

Any person who is the owner of lands free from charges may convert into a homestead 10 or 20 hectares of such land according as it is in Eastern or in Western Paraguay.

For the purposes of the Homestead Law the Government may appropriate land belonging to other owners than the State when such lands have been applied for by at least 100 colonists, but not to an extent greater than 7,500 hectares.

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The following figures show the number of definite titles delivered in each year from 1912 to 1919 to occupiers of public lands and lots in colonies subject to the provisions of the laws which we have out-lined.

Year.	Number of Titles.	Year.	Number of Titles.
1912	28	1916	182
1913	77	1917	182
1914	104	1918	262
1915	149	1919	283

The appreciable increase which may be noted from year to year in the delivery of definite titles and the considerable total number of titles delivered in the last eight years, which amounts to 1,267, indicate that the colonization laws have been applied on an increasingly larger scale and with good results.

MISCELLANEOUS INFORMATION RELATING TO LAND SYSTEMS

FRANCE

A NEW LAW CONCERNING SMALL HOLDINGS — *Journal officiel de la République Française*, Paris, 23 avril 1921.

According to the provisions of a new law, dated 19 April 1921, mortgage companies may grant mortgage loans to individuals to facilitate the acquisition, equipment, transformation and reconstruction of small rural holdings the value of which does not exceed 40,000 francs, whatever may be their area.

The loans must not exceed four fifths of the value, including the price of the cheap dwelling, but not including the expenses nor the premium payable on the life insurance policy which must be taken out to provide for the repayment of the debt in the event of the death of the borrower.

The companies which make these loans may be assimilated to the regional agricultural credit banks and obtain special advances from the State.

HOLLAND.

THE INCREASE IN THE PRICE OF LAND BETWEEN 1912 AND 1919 — *VERSLAGEN EN MIDLIEDDELINGEN VAN DE DIJRECTIE VAN DEN LANDBOUW* (*Reports and Communications of the Office of Agriculture*). The Hague, 1921, No 1.

Although the public sales of land only related to 4,124 hectares in 1921 and to 6,924 hectares in 1919, it is not uninteresting to note the increase in the price of each of the principal classes of land.

As will be seen from the table on page 394, the average increase was only 38.5 per cent. This figure, which is very small compared with the general increase in prices, seems to indicate that the Dutch farmers regard the present high prices as a passing phenomenon.

Price per Hectare of the Principal Classes of Land in 1912 and in 1919.

Class of land	1912	1917
		florins
Sea-coast alluvial lands. .	2,028	2,822
River valley alluvial lands	1,810	2,890
Meadow land	1,883	2,520
Sandy land	815	1,744
Reclaimed peat-bogs .	1,606	1,929
Gardens	3,532	3,844
General average	1,640	2,531

III. — MISCELLANEOUS QUESTIONS

— —

INFORMATION RELATING TO MISCELLANEOUS QUESTIONS.

HOLLAND.

THE WORK OF THE NATIONAL GRAIN OFFICE. — HET RIJESGRAAN BUREAU (*The National Grain Office*). Communication issued by the National Grain Office and published in the *Nieuwe Rotterdamse Courant*, 23 April 1921, evening edition.

The National Office for the Distribution of Grain and Flour, which was to be suppressed on 1 June 1921, was established at the beginning of the war by the Minister of the Interior, as a separate section of his department and was, at first, merely charged with the purchase of cereals. However, as the crisis became more acute, it developed into an organisation which took over a large part of the internal and external trade in cereals, of the milling industry, of the manufacture of oils and of some other industries, as well as of the internal trade in flour and all which relates thereto.

It interested itself in everything connected with the bread-supply, from the purchase of wheat in America by its representatives to the delivery of bread by the baker to his customers in exchange for a bread-ticket. Up to 1 July 1918 it had even to provide the necessary tonnage in accordance with the Law on the export of vessels and that on the requisition of maritime transport.

It had to buy (sometimes to requisition) beans, maize, barley, oats and other cattle feeds, as well as oil-seeds and other seeds, to collect them and to prepare them in different ways. The resulting products were placed at the disposal of the consumer by the distribution services.

The Grain Office had not only to distribute, but above all to provide for the food supply of the country.

Its most important task was to supply Holland with bread. At the beginning of the war, the bread supply was seriously threatened, Russia, Hungary and Roumania being cut off from Western Europe. Holland, which only produced sufficient wheat for two months and imported largely from Russia the rye necessary for making rye-bread, found herself deprived of her principal suppliers.

America remained accessible, but the importers had to suspend their orders owing to the complete disorganization of the grain market. To this disorganization was added an increased demand on the part of the public. From 3 August 1914 the Government obtained the right to requisition the wheat lying in the port of Rotterdam. It undertook itself the importation of corn from North America, and the necessary steps were taken to utilize the home-grown rye for the making of rye-bread. Milling was nationalized. These measures succeeded in their immediate object; the danger of a shortage of bread was for the time being averted.

However, the growing severity of the war increased the difficulties of the grain supply; submarine warfare seriously interfered with the imports from abroad, so that it was necessary to contemplate the possibility that even the United States might cease to supply grain to Holland.

The decrease in the imports was such that the reserve stock of foreign wheat, which still amounted to 120,000 tons in the autumn of 1915 was reduced to 14,000 tons in the spring of 1916, a stock sufficient only for about a week.

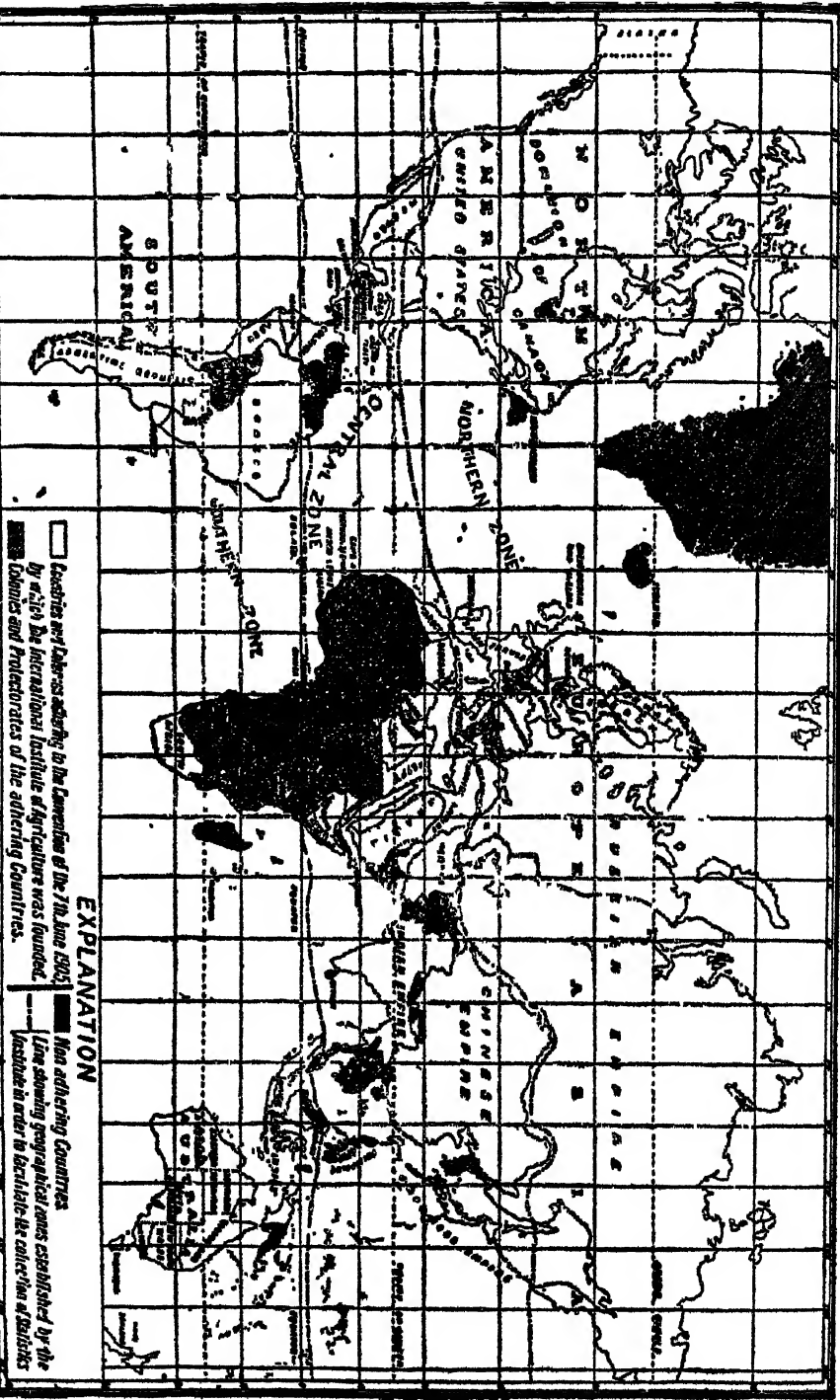
These difficulties were nevertheless overcome; at the worst, during this critical period, the Dutch people was obliged for a few months to do without white bread.

The most trying period was during the years 1917 and 1918; the importation of foreign wheat was rendered impossible by a poor crop in the United States in 1916 and by the entry of that country into the war, by the requisition of Dutch vessels by the allied and associated powers, and by the growing intensity of the submarine warfare. The country had to live on its own resources.

It was in this period that the Grain Office carried on its most difficult work. A strong propaganda was made amongst the agricultural population to induce them to increase the area of wheat sown and to hand over the crop to the Government as soon as it was harvested; the bread ration was reduced to 200 grammes per person per day, which is half the normal consumption; to assure even this ration all sorts of foreign substances such as dessicated potatoes, ground peas and beans, maize meal and flax meal, potato flour, etc., had to be incorporated in the bread. Steps were even taken and experiments made for the manufacture of a flour suitable for bread making containing lupins and wood pulp.

The armistice appreciably eased the situation, but the Grain Office has been obliged to continue its work up to the present time. In fact the situation, though eased, has not yet become normal. It was neces-

sary, first of all, to finish the delivery of the home-grown crops of 1919, for which minimum prices had been guaranteed. It was thought at first that it would not be necessary to continue the work of the Grain Office after that year, but in 1920 the price of wheat rose to such an extent that in September it was nearly 36 florins per 100 kilogrammes, as compared with 20 florins the previous year. In such conditions, a revival of the grain trade was not to be hoped for; everyone supposed that after this rise a fall in prices would follow. This is what happened and the price of wheat has now fallen to about 17.50 florins per 100 kilogrammes. In this new situation the grain trade could be revived and the Government decided to suppress the Grain Office on 1 June 1921. The Office was, therefore, in existence for seven years.



INTERNATIONAL INSTITUTE OF AGRICULTURE
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THE INTERNATIONAL INSTITUTE OF AGRICULTURE

ORIGIN OF THE INSTITUTE AND SUMMARY OF THE INTERNATIONAL TREATY.

The International Institute of Agriculture was established under the International Treaty of 7 June 1905, which was ratified by forty governments. Nineteen other governments have since adhered to the Institute.

It is a Government institution in which each country is represented by delegates. The Institute is composed of a General Assembly and a Permanent Committee.

The Institute, always[•] confining its attention to the international aspect of the various questions concerned, shall :

(a) collect, study and publish as promptly as possible, statistical, technical, or economic information concerning farming, vegetable and animal products, trade in agricultural produce, and the prices prevailing in the various markets ;

(b) communicate the above information as soon as possible to those interested ;

(c) indicate the wages paid for farm work ;

(d) record new diseases of plants which may appear in any part of the world, showing the regions infected, the progress of the diseases, and if possible, any effective remedies :

(e) study questions concerning agricultural co-operation, insurance and credit from every point of view ; collect and publish information which might prove of value in the various countries for the organization of agricultural co-operation, insurance and credit ;

(f) submit for the approval of the various governments, if necessary, measures for the protection of the common interests of farmers and for the improvement of their condition, utilizing for this purpose all available sources of information, such as resolutions passed by international or other agricultural congresses and societies, or by scientific and learned bodies, etc.

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PRINCIPAL WEIGHTS, MEASURES AND MONEY OF THE VARIOUS COUNTRIES AND THEIR BRITISH EQUIVALENTS

1 Cadastral arpent (Hungary)	=	1.42201	acres
1 Centimetre	=	0.393715	inches
1 Cho (60 ken) (Japan)	=	119.30327	yards
1 Crown (100 heller) (Austria-Hungary)	=	10 s.	at par
1 Crown (100 öre) (Denmark, Norway, Sweden)	=	15.1 $\frac{1}{8}$ d.	at par
1 Deciatine (2 tchetwert, (Russia)	=	2.69966	acres
1 Dinar, gold (100 para) (Serbia)	=	933/64 d.	at par
1 Dollar, gold (\$) (100 cents) (United States)	=	48.5 $\frac{5}{16}$ d.	at par
1 Drachm, gold (100 lepta) (Greece)	=	933/64 d.	at par
1 Egyptian Kantar	=	99.0498	lbs.
1 Feddan Masri (24 Kirat Kamel) (Egypt)	=	1.03805	acres
1 Florin, gold, or Gulden (100 cents) (Netherlands)	=	15.753/64 d.	at par
1 Franc (100 centimes) (France)	=	933/64 d.	at par
1 Gramme	=	0.03527	oz.
1 Hectare	=	2.47109	acres
1 Kilogramme	=	2.2	lbs.
1 Kilometre	=	1093.613	yards
1 Kokou (10 To) (Japan)	=	1.58726	quarts
1 Lei, gold (100 bani) (Rumania)	=	9 $\frac{83}{64}$ d.	at par
1 Leu (100 stotinki) (Bulgaria)	=	933/64 d.	at par
1 Lira (100 centesimi) (Italy)	=	933/64 d.	at par
1 Litre	=	{ 0.21998 0.0275	{ gallons bushels
1 Mark (100 Pfennige) (Germany)	=	11 $\frac{3}{4}$ d.	at par
1 Mark (100 penni) (Finland)	=	933/64 d.	at par
1 Metre	=	3.28084	feet
1 Milreis, gold (Brazil)	=	28.261/64 d.	at par
1 Milreis, gold (Portugal)	=	48.519/64 d.	at par
1 Peseta, gold (100 céntimos) (Spain)	=	933/64 d.	at par
1 Peso, gold (100 centavos) (Argentina)	=	38.1137/64 d.	at par
1 Pound, Turkish, gold (100 piastre) (Ottoman Empire)	=	188.015/64 d.	at par
1 Pund (Sweden)	=	0.93712	lbs.
1 Quintal	=	1.96843	cwt.
1 Rouble, gold (100 kopeks) (Russia)	=	28.1 $\frac{3}{8}$ d.	at par
1 Rupee (16 annas) (British India)	=	$\frac{1}{10}$	of £1 (gold)
1 Talarí (20 piastre) (Egypt)	=	48.111/32 d.	at par
1 Verst (Russia)	=	1166.64479	yards
1 Yen, gold (2 fun or 100 sen) (Japan)	=	28.037/64 d.	at par
1 Zentner (Germany)	=	110.23171	lbs.

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Part I: Co-operation and Association

CZECHOSLOVAKIA

THE CO-OPERATIVE MOVEMENT (continued).

By L. I. DVOŘÁK

Doctor of Laws, Manager of the Central Union of Agricultural Co-operative Societies, Prague.

§ 3. THE DEVELOPMENT OF AGRICULTURAL CO-OPERATION.

I *Federations of Co-operative Societies.* — In Bohemia, in Moravia and in Silesia, the *Kampličky* credit societies were formed for the most part from 1890 onwards. Their organization did not, however, make any very considerable progress until the moment when federations of these societies were formed in the different regions. Thus the Central Union of Agricultural Co-operative Societies of the Kingdom of Bohemia (*Ústřední jednota českých hospodářských společenstev v král. Českém*) was formed at Prague, and is now the most important co-operative federation in all the territory which was formerly comprised in Austria-Hungary. It now bears the name of Central Union of Agricultural Co-operative Societies, Prague, (*Ústřední jednota hospodářských družstev*).

This Union eventually included co-operative societies for the purchase of requisites and co-operative societies for the sale of produce. Side by side with it was formed in 1919, for political reasons, the Bohemian Federation of Czech Co-operative Societies and Associations (*Zemský svaz českých hospodářských družstev a společenstev*), now known under the name of Czechoslovak Federation of Agricultural Co-operative Societies, Prague (*Svaz československých hospodářských družstev*). It is an association with lim-

ited liability, which does not, however, contain more than one tenth of the number of co-operative societies which belong to the Central Union. In Moravia, too, there are two federations. The Central Federation of Czech Agricultural Co-operative Societies (*Ústřední svaz českých hospodářských společenstev*), formed in 1899, includes, besides agricultural co-operative societies, civil loan banks. In 1919, the co-operative societies formed an independent trading organization, which they called the Co-operative Agricultural Establishments of Moravia (*Země dělské družstevní podniky*) registered at Brno as a limited liability company.

The other Moravian federation, the Central Union of Czech Co-operative Agricultural Credit Societies for Moravia and Silesia (*Ústřední jednota českých hospodářských společenstev úvěrních pro Moravii a Slezsko*) was formed in 1898. It only includes the Kampeličky credit societies. It is only under the influence of the war that it has formed in certain districts associations called *Zadruga*, limited liability companies, which take the place of co-operative stores. Finally, in 1901, was formed the Union of Czech Agricultural Societies in the Duchy of Silesia (*Jednota českých hospodářských společenstev ve vévodství Slezském*), which includes, besides civil loan banks, Kampeličky credit societies, agricultural co-operative societies for purchase and sale, and workmen's co-operative distributive societies and building societies. The German co-operative societies have established a Federation in Bohemia, formed in 1895; a Federation in Moravia, formed in 1893, and a Federation in Silesia, formed in 1894. In Slovakia there is the Central Co-operative Society, Bratislava (*Ústředné družstvo*), in Subcarpathian Russia, the Provincial Union of Co-operative Societies, Užhorod (*Zemská družstevní jednota*).

The work of these federations includes the keeping of the accounts of the affiliated co-operative societies, joint purchase and sale, the carrying out of the inspections required by the law, and the defence of the general interests of co-operative societies. In regard to purchase and sale their work consists mainly in the joint purchase of agricultural requisites (fertilizers, feeding stuffs, seeds, coal, etc.) and the sale of agricultural produce (cereals, chicory, butter, alcohol). The work of inspection is done by the public authorities of the regions (territorial councils), because, according to the Law of 1903 on the compulsory inspection of co-operative societies, the territorial councils have the right to inspect such co-operative societies as have received subsidies from public funds or loans from official institutions (district agricultural credit societies). This duplication of the inspection has done no harm to co-operation, for it increases the confidence of the members in co-operative undertakings. The federations of co-operative societies and the territorial councils have succeeded, moreover, in co-ordinating this work.

2. *Relations between the Public Administration and the Co-operative Societies.* — The principle of public inspection and, more particularly, the subsidies granted to co-operative societies, have had a great influence on the development of co-operation. In the course of its evolution, agricultural co-operation has adopted the following point of view in regard to state

aid : Financial assistance must be given in order to support the legitimate action of private individuals for their own defence, but it must never take the place of this independent action.

In the greater number of cases, the public subsidies of all kinds, which are always carefully checked, have been beneficial. They quickened and strengthened co-operative action in its initial stages. The ultimate development of the co-operative societies enabled them to restore to the public what had been given to them, the taxable capacity of the members being increased.

In some districts, it must be admitted, this State aid was abused, and sometimes co-operative societies were formed merely in order to obtain the promised subsidy. In such cases it was quickly seen that the business of these societies was not developing regularly and they were obliged to go into liquidation (societies for the joint use of machinery).

The State subsidies were either direct or indirect. The *Kampeličky* banks always received 300 crowns from the public authorities of the province on their formation ; they repaid this sum as soon as the reserve fund exceeded the share capital subscribed, which quickly happened. This subsidy served for the payment of the initial expenses. The other co-operative societies, with the exception of the co-operative mills, usually received public subsidies for their equipment and also interest-free loans which they had to repay within ten years. The Federations of co-operative societies received subsidies to defray the expenses arising out of the service of inspection.

As the co-operative idea spread, more and more societies were formed, often with expensive equipment, which hardly thought of obtaining public aid and even in their initial stages relied on their own resources. At the present time these cases have become the rule.

There is another form of indirect subsidy, namely the grant of fiscal privileges ; the *Kampeličky* credit societies have been completely exempted from taxation and the other forms of co-operative society have special privileges in regard to the tax on profits, provided they only do business with their own members. Such privileges are, however, less than in countries where co-operation is more advanced.

3. *Development of the Work of the Kampeličky Co-operative Credit Societies.* — These societies differ in character in the different regions. Thus in the south and west of Bohemia, they are more of the nature of provincial savings banks, for in the greater number of cases the members only deposit their savings in them and the need of credit is only rarely felt. On the other hand, in the east and north-east of Bohemia they are of the nature of general loan banks, the members borrowing more than they deposit. It is only owing to the fact that the common central society receives the surplus funds of a part of the local credit societies that the others are able, in their turn, to borrow from the central bank. This union also secures other advantages for the local credit societies, more particularly by enabling them to obtain money at favourable rates of interest, corresponding to the smaller returns yielded by agriculture.

The local credit societies, as well as their federations, have pursued a policy in regard to interest differing somewhat from that of most financial concerns.

They are very conservative in making changes in the rate of interest and their rates are much more favourable to the borrowers than those of other concerns. Herein lies their great value for agriculture. They have succeeded without great difficulty in placing at the disposal of agriculture a credit of some hundreds of millions at a steady and moderate rate of interest, while, at the same time, their depositors have incurred no risks.

The Kampeličky credit societies are, as similar societies are in other countries, the chief source from which the small farmers, in particular, obtain credit for working expenses. They are, however, called upon from time to time to make loans for equipment, for the purchase of houses or land, etc. Such loans are not of the nature of long term credit, but are repayable in a period of six to twelve years, that is, in a period considerably shorter than the period of repayment of the majority of mortgage loans. It may be said that the Kampeličky credit societies have created a new form of credit for small farmers. It is often credit for the initial expenses of starting a farm; it is repaid out of the returns yielded by agricultural work and also by means of other work done by the borrowers (seasonal labour, etc.)

4. *Development of the District Agricultural Credit Societies.* — Side by side with the Kampeličky credit societies, grouped in the federations of which we have spoken, there are also in Bohemia independent credit concerns for the benefit of Czech agriculture. These are the district agricultural credit banks (*Okresní hospodářské záložny*). They have been formed by the fusion of certain old funds which had existed in Bohemia, Moravia and Silesia since the 17th century. Their original object was to accumulate in the large communes, during the years when the crops were plentiful, a certain quantity of corn for the purpose of helping the peasants in times of scarcity and also of facilitating the regular payment of taxes. The conversion of these funds into cash and their concentration in each judicial district in a single financial concern, the assets of which, according to law, are considered as being public property, gave birth in Bohemia to the district agricultural credit banks. On the other hand in Moravia and in Silesia, the union of these funds has not up to the present been carried out, although their assets are greater than those of the district banks of Bohemia. These funds confine themselves to making loans out of their own assets (taxation funds). The banks supply, in Bohemia, more particularly credit to farmers for working expenses. The district agricultural credit banks have developed most in the Czech part of Bohemia, where they soon obtained power to receive deposits. On the other hand, the German banks have confined themselves to the utilization of their own funds which they have for the most part invested in mortgage loans to farmers. The Czech agricultural credit banks have also succeeded in many instances in obtaining the guarantee of the district, up to a certain sum, for their deposits, which as might be expected, has increased their popularity. Although at the commencement

they principally supplied credit for working expenses, they have more and more granted mortgage loans, following in this the example of the savings banks and the civil loan banks, so that they are now, side by side with the mortgage banks and savings banks, one of the most important sources of mortgage credit for farmers. Almost all the farmers of the district are members of these banks, and as they are mutually acquainted it is possible to form a just estimate of the creditworthiness of the borrowers.

For a long time these banks had no central organization. The greater number of them had a financial union in the Territorial Fund for the Benefit of Small Farmers in Bohemia, founded in 1899 out of the resources of the country by the territorial administration in order to help the small peasants. Later, in 1911, these banks formed the Federation of District Agricultural Credit Banks (*Svaz okresních hospodářských záložn*) and entered for the most part into union for business purposes with the Czechoslovak Agrarian Bank at Prague (*Agrární banka československá*). According to its rules they are represented in its management just as the Kampeličky credit societies are.

Although, side by side with the district agricultural credit bank there are in each district several Kampeličky credit societies, so that there are two distinct types of agricultural financial institution receiving deposits and granting loans for working expenses, it cannot, however, be said that their work on similar lines is hurtful to agriculture. The fact that there are two sorts of credit institutions compels them to give substantial advantages both to the depositors and to the borrowers, which is by no means harmful. In reality a certain difference shows itself between them, the district banks serving rather the occupiers of medium-sized farms, whilst the Kampeličky credit societies serve the small farmers and the other rural classes (artisans and agricultural labourers). Up to the present the representatives of both types of institution have succeeded in working side by side to the advantage of agriculture.

5. *Development of the Co-operative Societies for the Purchase of Agricultural Requisites.* — Side by side with the co-operative credit societies a strong organization of other agricultural co-operative societies has sprung up. The various kinds of these societies have obtained very different results. However the greater number of them have long since overcome their initial difficulties and several of them are undertakings of the first importance.

Co-operation for the purchase of agricultural requisites was the first to develop. The Kampeličky credit societies took up this work through the medium of their central organizations. Thus they purchased for their members fertilizers, machinery, seeds, feeding-stuffs, coal, etc. The employee entrusted with this work drew up the list of the articles required and afterwards gave the order. When the order was executed, the various purchasers took over the goods at the station at which they had been delivered. The advantage of this system consists in its cheapness and simplicity. It has, however, this disadvantage, that the purchaser must take over the goods immediately after their arrival at the station and this gives rise to certain difficulties during the time of urgent agricultural work.

Side by side with the *Kampeličky* credit societies, special co-operative societies were formed for the purchase of agricultural and domestic requisites. Sometimes the co-operative stores undertook this work, but their principal object was the joint sale of agricultural produce. In the course of time, the need was felt to form such societies in each district. In Moravia, however, it is only since the war that it has been possible to do this.

The co-operative societies for the purchase of agricultural requisites, and the co-operative stores which undertook this work did not adopt the principle of payment in cash. They supplied goods on credit, which was only justified in so far as the goods were paid for out of the produce of the next harvest. It happened, however, that it was not so and then the co-operative societies had large outstanding credits amongst their members. Although the *Kampeličky* credit societies and the other co-operative societies purchased a large quantity of goods every year, they had not the idea, until the war, of supplying their needs by their own production, that is by undertakings acquired or formed by themselves. They confined themselves to making contracts with the suppliers.

None the less, co-operative purchase has had a remarkable success, which has increased from year to year, especially in regard to the purchase of fertilizers and coal.

6. *Development of the Co-operative Sale and Utilization of Agricultural Produce.* — The co-operative sale of agricultural produce, particularly grain and potatoes, which is undertaken by the co-operative stores, was more difficult to carry out than the joint purchase of agricultural requisites. These co-operative societies have developed chiefly in Bohemia. They began to be formed towards 1890, with costly equipment and large stores. It was hoped that by accumulating large quantities of corn they would be able to exercise a greater influence over the prices, but when it was found that this result was not attained, smaller societies were formed, which were less costly but were often more easily worked, having more direct relations with their members. At the present time societies of this kind exist in almost every district. They receive agricultural produce from their members for outright sale, for sale on commission has not been largely adopted. They principally undertake the sale of wheat, barley (for export), rye, oats, and to a less extent, potatoes. Fairly frequently these societies supplied the army with the produce it required (hay, straw, oats, rye), through the medium of their central organizations. Besides the army, these societies have as their principal clients the breweries, the mills, and, when they do not themselves export grain, the exporters.

The formation of co-operative dairies became more and more necessary as the population of the towns increased and the demand for milk and dairy produce became greater. They were formed, particularly in Moravia and in the German parts of Bohemia, of the model of large dairies, with a complete mechanical equipment. On the other hand, in other districts, large dairies were only formed in the large towns; in the country, in remote districts, smaller dairies were formed, with less elaborate plant, usually worked by hand. It was soon seen that these dairies required to be central-

ized in order to be able to compete successfully with private undertakings. Unfortunately the war rendered difficult the carrying out of these plans. On the other hand, the co-operative dairies were very successful in Moravia and organized a combined trade in butter which works well and supplies the Vienna market as well as that of Prague and of the watering places.

At the same time as the idea of improving stock breeding was spreading, co-operative societies were formed for the utilization of potatoes, that is, distilleries, societies for the manufacture of potato-flour, and societies for the dessication of potatoes. The co-operative distilleries have been formed, for the most part, on the Czechomoravian Plateau, where potatoes are most extensively cultivated. The agricultural distilleries were generally in the hands of the large landowners, who had a sufficiently large quantity of potatoes and endeavoured to keep the advantages which their distilleries enjoyed thanks to the tax on alcohol. In spite of this, it was found possible to establish several flourishing co-operative distilleries, which form an important group amongst the other country distilleries. They have all joined to form a Co-operative Society of Country Distilleries (*Društvo hospodářských lihovarů*) which undertakes the sale of the alcohol produced. The co-operative societies for the manufacture of potato-flour and the co-operative societies for the dessication of potatoes are distinct from the distilleries.

It is interesting to note the development of the societies for the drying of chicory. Chicory has been cultivated in Bohemia since 1880, notably in the lands bordering on the Elbe. The drying of the roots was done by private firms and the dried roots were then sold to the firms who roast them. Since 1900, the cultivation of chicory has increased considerably. What chiefly encouraged it was the opposition of the beetroot growers to the conditions imposed by the beetroot merchants' ring. The beetroot growers endeavoured, by cultivating an equally profitable crop, to escape from the hard conditions imposed by the ring and at the same time to release themselves from their dependance on the sugar-refineries. The greatest success was achieved in the neighbourhood of Hradec Králové, where several sugar-refineries were obliged to stop working or to restrict their production for want of beetroot. The peasants who took up chicory-growing in place of beetroot-growing, formed at the same time their own co-operative societies for drying the chicory. These grew to such an extent that they soon produced two thirds of all the dried chicory roots in Bohemia and even in the whole of the former Austria-Hungary. All these co-operative societies became members of a Federation of Co-operative Societies for the Dessication of Chicory and of Beetroot, Prague II, Hybernská ul. 20. (*Svár sušárně čekanky a řepy*). This federation sells all the dried chicory to the sliced root factories; it also undertakes the purchase of seed for the growers. The federation conceived the idea of establishing its own factory and it finally succeeded in carrying it out during the war. All the co-operative societies for the dessication of chicory, in collaboration with the federation of which we have spoken and the Central Union of Czech Agricultural Co-operative Societies at Prague, formed a special society under the name of Coffe

Industry of the Co-operative Societies for the Dessication of Chicory, Society with Limited Liability, Prague II, Hybernská ul. 20 (*Kavoprávní společnost spojených družstevních sušáren společností s. r. o.*). This society, the initial capital of which was 3,000,000 crowns and which has a production equal to three fourths of the entire production of dried chicory of Czechoslovakia, is now one of the most flourishing undertakings in the country in the sliced root industry and it is at present forming very promising connections with foreign countries with a view to export.

Although the work of co-operation in the sale of live stock has been undertaken by independent organizations, established in quite a different form, co-operative societies for the breeding and sale of live stock work with success in Moravia and especially in Silesia. These societies have had a beneficial influence on the improvement of the breeds and have on the other hand brought about a better organization of the sale of live stock in general. In this connection it may be mentioned that the Co-operative Society for the Sale of Live Stock at Střebovice works particularly well; to this society must be attributed a large part of the progress in pig-breeding in Silesia. By a scientific selection of the breed and by the methods of breeding, it has succeeded in producing a small but very hardy and easily fattened breed. In Bohemia, in the frontier districts, there exists a certain number of co-operative grazing societies, which are particularly important in promoting the scientific breeding of stock.

Co-operative societies for the sale of fruit and those for the sale of vegetables are still only in their initial stages. The co-operative flax societies have given particularly bad results. They suffered, as indeed did all flax production in Europe, from the great competition of Russian flax supplied on advantageous conditions.

7. *Development of the Co-operative Societies for the Use of Agricultural Machinery and of the Co-operative Societies for the Production and Distribution of Electricity.* — The co-operative societies for the joint use of agricultural machinery supplied their members with steam threshing machines and other machines. After a very rapid development at the start, these societies, which were subsidized out of public funds, proved to be too inelastic to satisfy the need for machines for joint use. It is for this reason that in each year since 1912 a certain number of these societies has gone into liquidation. However their place is taken by another kind of association, formed by several farmers who become joint owners of machines purchased in common.

We may note, in a similar field, the co-operative societies for weighing, formed in Moravia; their object is the instalment in the communes of weigh-bridges for the use of their members.

As to the co-operative societies for the production and distribution of electricity, they are often installed in water mills. In the beginning they were usually only small generating stations of merely local importance. As time went on the electrification of large districts and even of the whole of Bohemia, particularly in the provinces, began to be organized in the form of co-operative societies of consumers of electricity. It cannot be

denied that the influence of the small co-operative electricity supply societies has often made itself felt far beyond their own field of action. They spread the idea of electric lighting and of the use of electricity as a motive power for agricultural and industrial machinery. The districts in which this propaganda was made willingly accepted a systematic electrification. Agricultural co-operation possesses a great undertaking for the production and distribution of electricity at Dražic in Bohemia and at Věrovany in Moravia, besides a certain number of smaller co-operative electrical generating stations. From these generating stations the current is distributed in a great number of districts, so that they may be considered as being amongst the largest central generating stations of Central Europe. The societies for the use of electricity are affiliated to the Federation of Societies for the Use of Electricity at Hradec Králové, which is based on the local societies, but enjoys the collaboration of the public representatives of the districts. They will soon be supplying current to about 22 districts in Eastern Bohemia.

8. *Development of the Co-operative Societies in Slovakia.* — The development of agricultural co-operation in Slovakia was not so satisfactory under the old monarchy. It was only from 1913 onwards that it was found possible, with the help of the Central Union of Agricultural Co-operative Societies at Prague, to popularize the idea of co-operation amongst the Slovak farmers in spite of many obstacles. A certain number of agricultural co-operative societies were formed in Slovakia, chiefly distributive societies and credit societies.

The number of co-operative credit societies in Slovakia and Subcarpathian Russia in 1914 may be estimated at 500.

The credit societies in Slovakia have about 170,000 members; their capital amounts to 35,940,000 crowns; their reserve funds amount to 4,120,000 crowns; they have deposits to the amount of 37,183,000 crowns. In 1904, amongst the co-operative credit societies affiliated to the National Central Co-operative Credit Society there were 229 in Slovakia, containing 48,247 members and having capital amounting to 2,149,000 crowns, reserve funds amounting to 202,000 crowns and deposits amounting to 5,410,000 crowns. In Subcarpathian Russia there were 80 of these societies, containing 15,590 members; their capital amounted to 336,000 crowns; their deposits to 363,000 crowns and their reserve funds to 30,000 crowns.

These co-operative societies are not based on the principle of unlimited liability. They are thus obliged to pay more attention to their capital and reserve, in which they resemble the civil loan banks rather than the Kampeličky rural credit societies. This is also seen in the relatively larger number of members and particularly in the use which they make of bills when granting a loan.

The distributive co-operative societies which exist in Slovakia and in Subcarpathian Russia are, for the most part, formed by peasants; they may, therefore, be considered as agricultural co-operative societies. In 1911 there were 565 such societies in Slovakia. They contained 90,638 members and had an aggregate capital of 2,227,000 crowns; they sold goods to the

value of 27,386,000 crowns. In Subcarpathian Russia there were 13 distributive societies, with 1,485 members, a capital of 86,000 crowns and a turn-over of 1,800,000 crowns.

In 1916 there were in Slovakia 454 co-operative societies containing 76,601 members and supplying 389,998 persons; these societies sold goods to the value of 33,425,000 crowns. Adding to these societies those of Subcarpathian Russia, there were 470 co-operative societies containing 79,148 members and supplying 395,733 persons; their turn-over was 34,064,000 crowns and their paid-up capital 2,404,000 crowns. The goods which were supplied to them were chiefly obtained from their central society, the "Hangya", which established several branch depôts in Slovakia.

After the union of Slovakia to the other Czech countries, Slovak co-operation began to have the effective support of the Central Union of Czech Agricultural Co-operative Societies at Prague. A purely Slovak central society was first formed, the Central Co-operative Society at Bratislava (*Ústredné družstvo*). In less than a year, 197 co-operative credit societies, 23 miscellaneous societies and 749 co-operative distributive societies became affiliated to this central society, making a total of 969 affiliated co-operative societies. This organization has been entrusted by the law with the difficult task of liquidating, as promptly and as advantageously as possible for the Slovak co-operative societies, their relations with their old central society at Budapest.

(To be continued).

JAPAN.

THE DEVELOPMENT OF CO-OPERATION.

OFFICIAL SOURCES:

KAJŌ JIZAI GENKŌ NŌNEŌN HŌREI SHŪRAN (*Collection of the Laws and Regulations in force relating to Agriculture and Commerce*). Prepared by the General Secretariat of the Ministry of Agriculture. Three volumes. Published by the Society for the Study of Provincial Administration. Tokyo, 1919 to 1921.

SANGYŌ KUMIAI YŌRAN (*Report on Co-operative Societies*). Ministry of Agriculture and Commerce. Vols. 7 to 14, 1909 to 1919.

YURYŌ SANGYŌ KUMIAI JIREI (*Typical Examples of Co-operative Societies*). Ministry of Agriculture and Commerce. 1 Vol. Published by the Central Union of Co-operative Societies. Tokyo, 1 March 1920.

SANGYŌ KUMIAI CHŪŌKWAJ, TEIKWAN NARABINI SAISOKU (*Rules and Miscellaneous Regulations of the Central Union of Co-operative Societies*). 1 Vol. Published by the Central Union of Co-operative Societies. Tokyo, 1910.

NŌGYŌ SŌKŌ, SANGYŌ KUMIAI, NŌKVAI KWANKEI HŌREI (*Laws and Decrees relating to Co-operation, to the Storage of Agricultural Produce and to Agricultural Associations*). Agricul-

- tural Department of the Ministry of Agriculture and Commerce. 1 Vol. Tokyo, June 1919.
- NÔGYÔ-SÔKO KÔYÔ (*Monograph on Stores for Agricultural Produce*). Agricultural Department of the Ministry of Agriculture and Commerce. 1 Vol. Published by the Imperial Agricultural Association. 2nd Edition, Tokyo, 1918.
- NÔGYÔ-SÔKO JIREI (*Examples of Stores for Agricultural Produce*). Agricultural Department of the Ministry of Agriculture and Commerce. 1 Vol. Published by the Imperial Agricultural Association. 2nd Edition, Tokyo, 1918.
- TAISHÔ 7 MENDÔ NÔGYÔ-SÔKÔ JIGYÔ SEISREI HYÔ (*Statistical Tables on the Work of the Stores for Agricultural Produce in the Year 1918*). Agricultural Department of the Ministry of Agriculture and Commerce. Tokyo, 1920.
- HONBÔ NÔGYÔ YÔRAN (*General Notes on Agriculture in Japan*). Agricultural Department of the Ministry of Agriculture and Commerce. 1 Vol. Tokyo, 29 October 1920.
- DAI 35 JI NÔSHÔMU TÔKEI-HYÔ (*Agricultural and Commercial Statistics, Vol. 35*). Statistics Office of the General Secretariat of the Ministry of Agriculture and Commerce. 1 Vol. Tokyo, 1920.
- NIHON TEIKOKU DAI 38 TÔKEI NENKAN (*Statistical Year Book of the Japanese Empire*). Statistics Office of the Imperial Cabinet. Tokyo, 1920.
- NÔJYÔTÔKEI (*Agricultural Statistics*). Agricultural Department of the Ministry of Agriculture and Commerce.

OTHER SOURCES :

- SATÔ (Prof. K.) : Sangyô-kumiai kôwa (*Lectures on Co-operation*). Tokyo, 1919.
- SATÔ (Prof. K.) : Shinyô-kumiai ron (*Essay on Co-operative Credit Societies*). 1 Vol. Published by the Central Union of Co-operative Societies. Tokyo, 1919.
- SATÔ (Prof. K.) and YAMAMOTO (R.) : Sangyô-kumiai no keiei (*The Management of Co-operative Societies*). 1 Vol. Published by Seibikô. Tokyo, 1920.
- ISHIDA (D.) : Sangyô-kumiai no setsuritsu to keiei (*The Formation and Management of Co-operative Societies*). 1 Vol. Published by the Central Union of Co-operative Societies. Tokyo, 5th Edition, 1920.
- DÔKE (H.) : Shorai no nôka (*The Farmer of the Future*). 1 Vol. Published by the Central Union of Co-operative Societies. 3rd Edition. Tokyo, 1920.
- FUJII (K.) : Sangyô kumiai nijitsumu skikei (*Practical Guide to Co-operation*). 1 Vol. Published by the Central Union of Co-operative Societies. 12th Edition. Tokyo, 1920.
- TOKUBETSU HYOCHO SANGYÔ-KUMIAI JISEKI (*Reports on the Development of the Subsidised Co-operative Societies*). Series 1 to 7. Published by the Central Union of Co-operative Societies, 1916 to 1920.
- CHÔ-SHÔ-NÔ TO SANGYÔ-KUMIAI (*The Co-operative Societies and the Small and Medium Farmers*). Inquiry carried out by the Imperial Agricultural Association. Tokyo, 1919.
- Sangyô-kumiai (*Co-operation*). Monthly journal of the Central Union of Co-operative Societies. Years 1916 to 1921.

§ 1. ORIGIN AND DEVELOPMENT OF CO-OPERATIVE SOCIETIES.

Co-operative Societies arose in Japan about 1892, chiefly through the initiative of Viscount Shinagawa and Viscount Hirata, the two apostles of co-operation in Japan.

A great impulse to the co-operative movement was given in 1900 by the promulgation of the law regulating the formation of co-operative societies. From that time they have steadily increased in number and prosperity, so that at present there are more than 13,000, and the cities and

villages in which there is at least one co-operative society are more than 12,000 in number. The co-operative societies are unequally scattered through the country; in some cases several co-operative societies exist in the same city, town or village, while other localities have none. But on the whole, considering that the co-operative movement has developed in the short period of scarcely twenty years, its distribution through the chief cities and villages is very encouraging. Much still remains to be done, since at the present moment there are not a few co-operative societies which are not working to the full extent to which they might work, or are not working at all.

In fact, the period of initial effort and of Government encouragement is drawing to a close and will give place to a period in which the full efficiency of the co-operative system should make itself felt.

The future of co-operative societies in Japan depends on the revival of the inactive societies, and on the greater development of each society throughout the country, and also on the formation of strong unions which will be in a position to work without many obstacles, and on closer relation among the societies themselves, so as to enable them to exercise a powerful influence over the industries and agriculture of the nation.

To sum up the whole situation at the present time we may say in the first place that co-operative credit societies are the most numerous, supplying as they do a want long felt by the peasants and artisans.

At a certain distance follow the co-operative societies for the purchase of requisites, the greater number of which are formed for the purpose of purchasing fertilizers. But these are still in their infancy. In fact their purchases of fertilizers in 1918 amounted to 23,500,000 yen, an insignificant figure if we reflect that in that year Japan consumed about 120,000,000 yen of fertilizers, which means that rather less than 20 per cent. of the fertilizers used was actually supplied by co-operative associations.

Co-operative societies for sale and production are as yet only imperfectly developed, and practically belong to the future.

The co-operative storage of agricultural produce is subsidized by the government and there is reason to hope that a large development of this branch of co-operation will prove of great use to agriculturists.

The development of co-operative distributive societies has only recently made progress, especially in the great urban centres partly on account of the high cost of living and partly as the result of an awakening among consumers. The special efforts made by the government have materially aided the development of this branch of co-operation, which in future will doubtless become very flourishing.

§ 2. LEGISLATION CONCERNING CO-OPERATIVE SOCIETIES AND THEIR ORGANIZATION.

In 1891 the Japanese government presented to the Imperial Diet a bill concerning co-operative credit societies, which, however, was not even discussed.

In 1897 there was a long discussion in the Diet as to a new bill on co-operative societies, which was rejected. Only in 1900 was it possible finally to obtain the sanction of the legislature to the Law on Co-operative Societies, which has had a powerful influence on the rapid and constant development of the co-operative movement in Japan.

The Law of 1900 was amended in 1906, 1909 and recently in April 1921. Its chief characteristics are of great interest. It gives a precise definition of the co-operative society, strictly defines its objects, and classifies co-operative societies in four great groups. It also prescribes a rigorous control of their work on the part of the government, among other things requiring from the co-operative societies that they should send in regularly every year a detailed report with statistics of their transactions for the last twelve months.

In the following survey of the constitution and working of co-operative societies, we shall take account of all the modifications of the fundamental law of 1900, with the exception of those made by Law No. 73 of 12 April 1921, which has not yet come into force. But of this law we shall state briefly the essential points, for the information of our readers.

Fundamental Principles — A co-operative society (*Sangyō-kumiai*) is an association having legal existence (*hōjin-dantai*) formed by persons of modest means in order to promote and develop, according to the principle of mutuality, the exercise by the members of their occupations and the improvement of their economic condition.

The conception includes the following points

(1) A co-operative society is an organization formed to facilitate the carrying on by the members of their occupations and to contribute to the improvement of their economic condition.

(2) As a general rule, the profits made by a co-operative society are reserved for its members, and must not exceed fixed limits determined by law.

(3) Co-operative societies are strictly economic.

These are the essential characteristics fixed by Japanese law to distinguish co-operative societies from other kinds of association.

Classes of Co-operative Societies — Co-operative societies are divided into four classes, according to the nature of the work they undertake, viz.

(1) Co-operative credit societies (*shūnyō-kumiai*).

(2) Co-operative societies for the sale of produce (*hanbai-kumiai*)

(3) Co-operative societies for the purchase of requisites (*kōbai-kumiai*).

(4) Co-operative productive societies (*seisan-kumiai*).

These classes are not mutually exclusive; in fact a co-operative society may belong to more than one class. For instance, co-operative credit societies often work at the same time as societies for the purchase of requisites and societies for the sale of produce. In such a case the organization is called a co-operative society for credit, purchase and sale.

Federations of Co-operative Societies (*Sangyō-kumiai rengo kwai*). — The federation, which has a legal existence, is formed by the union of at least seven co-operative societies.

The federations are of four classes, according to the class of co-operative society by which they are formed. A federation must be formed only of co-operative societies of the same class, for instance, only co-operative societies for the sale of produce can group themselves to form a federation of co-operative societies for the sale of produce. There is, however, an exception for federations of co-operative credit societies, which may legally admit to membership co-operative societies or federations of other classes.

In all that concerns their organization and work, the federations must conform to the principles laid down for co-operative societies.

Liability of Members. — Co-operative societies classified according to the degree and nature of the liability of their members, are of three kinds :

- with limited liability (*yūgen-sekinin*) ;
- with unlimited liability (*mugen-sekinin*) ;
- with guaranteed liability (*hoshō-sekinin*)

In the case of co-operative societies with limited liability, every member is liable for the debts of the society only to the extent of the shares he holds.

In the case of co-operative societies with unlimited liability, if the assets of the society are insufficient to meet its liabilities, the members are jointly and severally liable to the creditors for the full amount of the debts.

In the case of co-operative societies with guaranteed liability, each member is liable up to a fixed sum beyond the amount represented by the shares he holds.

Of these three kinds of co-operative society, the most numerous are those with limited liability, which at the close of the year 1919 were 70 per cent. of the whole.

With respect to liability, federations are of two kinds, those with limited and those with guaranteed liability.

The Members (*Kumiai-in*). — The qualifications of a member are fixed by the rules of each co-operative society, as may seem best adapted to the society in question. Eligibility is generally confined to persons economically independent. Sometimes it is restricted to persons of a particular calling.

These co-operative societies, by the nature of the work which they carry on, are necessarily composed of persons of small means. But at the same time, co-operative societies in Japan, being formed for the most part in rural districts, number among their members chiefly agriculturists of limited means.

In fact, classifying the members according to their occupation, it is ascertained that agriculturists represent 82 per cent. of the total number, persons engaged in industry 3.9 per cent., persons engaged in trade 6.7 per cent., persons engaged in the sale of fish and other marine produce, 1.6

per cent., those engaged in the sale of forest produce 1 per cent., and all other occupations 4.8 per cent.

The minimum legal number of members required for the formation and working of a co-operative society is seven, but this number is generally far exceeded.

At present the average number of members per co-operative society is 145, but some have more than 3,000 members, and one has as many as 19,782.

A new member may be admitted without much formality; only in the case of co-operative societies with unlimited liability, the consent of the whole assembly of members is necessary.

Members may freely withdraw from a co-operative society at the end of each working year, but they must give the society previous notice of not less than six months nor more than two years.

Immediate cessation of membership is recognized only in the following cases: (1) loss of the qualifications prescribed by the rules of the society for becoming a member; (2) death; (3) bankruptcy; (4) loss of civil capacity; (5) expulsion.

All these conditions are prescribed by the legislation on co-operative societies.

Area of Operations. — The area within which a co-operative society may carry on its work is fixed by the society itself according to local conditions and the nature of its work.

Nevertheless in the case of co-operative credit societies the law requires, under pain of a fine, that they should fix as their area of operations an administrative unit, that is a city (*shi*) town (*chō*) or village (*son*). Since a co-operative credit society is as a rule obliged to grant loans without security, this limitation has naturally arisen out of the impossibility of ascertaining the position of each member if a society has too extensive a field of action.

The area of operations of a federation, except in special cases, corresponds to the territorial limits of a province.

General Meetings — The deliberative body of the co-operative societies is the general meeting, which is convened annually by the committee; it may be ordinary or special.

The ordinary general meeting is usually held in the first month of the financial year. Important business, such as the election of the committee and auditors, their re-election, amendments to the rules, amalgamation with other co-operative societies, or dissolution, requires as a rule the presence of at least half the members, and a three-fourths majority of the members present. Business of minor importance may be decided merely by a majority of those present at the meeting. Every member has a right to only one vote, whatever number of shares he may hold. The vote may be delegated to a proxy, who must be chosen from among the members.

Committee and Auditors. — The committee of management is an executive body and represents the society in all its business. Its members

(*ryūi*) act in conformity with the rules and with the decisions adopted by the general meeting.

The committee of management is usually composed of two, three, seven or eight committeemen, who hold office for a period varying from one to five or six years. In certain cases each committeeman has a distinct function, and sometimes full powers are entrusted to one or two of them.

The functions of the auditors (*kanji*) consist chiefly in inspecting the business carried on by the society. Their number and their tenure of office vary according to the number and tenure of office of the committeemen. Both committeemen and auditors are elected among the members of the general meeting: as a rule they receive no remuneration, except in certain cases, when one of them is appointed manager with a fixed salary. In rural districts the mayor of the village and other important persons are often elected as committeemen.

The committeemen are assisted by a varying number of paid secretaries.

Owned Capital. — Every member is expected to subscribe for at least one share, and not more than thirty. In exceptional cases a single member may hold as many as fifty shares. The value of a share, except in special cases, must not exceed fifty yen: the average nominal value of a share is twenty yen.

The owned capital (*zaisan-mokuroku*) of a co-operative society is formed of the share capital, a reserve fund and other accumulated funds. The law requires that every month the co-operative society shall set aside a certain sum until a sum equal to the total amount of the share capital has been reached. A co-operative society is also required to set aside at least a quarter of the profits (*joyokin*) of each working year, until such savings have reached the sum required for the reserve fund.

All entrance fees, dividends, premiums paid on the increased value of shares etc., must by the law be allocated to the reserve fund. The balance remaining after the sum to be allocated to the reserve fund has been deducted, may be allocated in various ways, it may be divided among the members, given as a bonus to employees, or devoted to special objects. The dividend to the members may be fixed (1) in proportion to the shares held by each or (2) in proportion to the amount of business done.

The first form of dividend, viz. that which is in proportion to the shares, cannot legally exceed 6 per cent. of the shares except in special circumstances when it may be as much as 10 per cent.

The law sets no limit to the other form of dividend, provided that it is in strict conformity with the principle of mutuality in the distribution of profits.

Some figures will give a general idea work of the co-operative societies as far as it is can be represented by a financial statement. The total amount of the shares paid up at the end of 1918 was 37,310,000 yen. The various reserve funds and other accumulated funds amounted in all to 17,030,000 yen, making the total owned capital of the society 54,340,000 yen; that is, an average of 4,340 yen per society and 26 yen per members.

Formation and Dissolution of Co-operative Societies. — The formation of co-operative societies is effected with the authorization of the Government.

As a preliminary step the rules must be drawn up in conformity with certain provisions of the law, and application for authorization must be made to those local administrative authorities within whose jurisdiction the headquarters of the society is to be. As soon as this authorization is obtained the society is formed.

Every member of the society is from that date expected to pay the first instalment on his shares and the formation of the society must be registered in the Registration Office.

A co-operative society may be dissolved for the following reasons :

(1) when the circumstances arise which are laid down in the rules as resulting in dissolution ;

(2) by the decision of the General Assembly ,

(3) by amalgamation with another co-operative society ;

(4) by the diminution of the members below the number seven ,

(5) by bankruptcy .

The number of co-operative societies dissolved between 1900 and 1917 was 3,341. Of this number 2,830 were voluntarily dissolved, 180 were dissolved by order of the Government, and 331 ceased to exist because the law required it. Of the voluntary dissolution the chief causes were :

(1) too few members ,

(2) want of harmony among the members, indifference, want of comprehension of the objects of co-operation ,

(3) the want of capable committeemen, etc.

Supervision and Management — Co-operative societies and their federations are under the supervision of the administrative head of the *gun* (1), of the prefects and of the Minister of Agriculture and Commerce.

Urban co-operative credit societies and co-operative societies in urban districts are supervised by the Finance Ministry as well as by the authorities mentioned. The supervising authorities have however at the same time the duty of encouraging and guiding the co-operative societies.

At the Ministry of Agriculture and Commerce six technical agents are engaged in propagandist work, and the provincial offices generally employ two or three agents for the same purpose.

Privileges. — In order to foster co-operation the Government has granted the following privileges

(1) Co-operative societies enjoy the privilege of exemption from the tax on business transactions, and from the income tax, as well as from the registration tax when registration is enjoined by the law on co-operative societies

(2) The Government gives facilities to co-operative societies which are willing to undertake contracts. Thus the Japanese army contracts with the co-operative societies for the supply of many necessary articles, such as grain, rice, hay, etc.

(1) Rural district subject to the prefecture.

(3) The Government purchases bonds of the Mortgage Bank of Japan and of the Bank for the Colonization of Hokkaido, with the funds of the Deposits Section of the Finance Ministry, formed chiefly of postal savings bank deposits. These banks lend the money thus obtained from the Government directly to the co-operative societies or their federations at a low rate.

The Mortgage Bank of Japan grants such loans through the Agricultural and Industrial Banks, which act as its agents. This system of loans was begun in 1910. Up to the end of 1919 a sum of 134,300,000 yen had been granted in loans at an interest varying from 5 to 6 per cent.

(4) The Mortgage Bank of Japan and other land credit banks are authorized to grant loans to co-operative societies without security. Up to the end of 1918 the amount of the loans granted in this way by the Mortgage Bank of Japan was 6,910,000 yen.

Amendments made by the Law of 1921. — The following are the principal amendments made by the Law of 1921.

(1) Co-operative societies for the purchase of requisites are authorized to produce directly the articles which they supply to their members. Co-operative productive societies (*seisan-kumiai*) which, according to the fundamental law, perform two distinct operations, namely complete the working up of the produce of their members (*kakō*) and place machinery or plant at the disposal of their members (*riyō*) must no longer directly undertake productive work but must confine themselves to placing the plant of the society at the disposal of the members. The name "co-operative productive society" is abolished and replaced by that of "co-operative society for the utilization of plant" (*riyō*).

(2) In the absence of the committeemen, or when there are no committeemen, the auditors are authorized to act for them in certain cases.

(3) When there are no committeemen, the local supervising authorities may nominate temporary committeemen.

(4) Federations may henceforth be formed, not only of co-operative societies, but also of federations of co-operative societies. But a federation of co-operative credit societies may admit to membership only federations of co-operative societies which do not carry on credit business. Also, federations of co-operative societies of other classes may only admit to membership federations doing the same class of work. In consequence of the conversion of the co-operative productive societies into co-operative societies for the utilization of plant, federations of co-operative productive societies must transform themselves into federations of co-operative societies for the utilization of plant (*riyō-kumiai-rengōkwaï*). Federations of co-operative societies for the purchase of requisites will also be henceforth authorized to produce directly the articles to be furnished to co-operative societies or to federations of co-operative societies for the purchase of requisites affiliated to them.

The procedure for the registration of amendments is much simplified, thereby facilitating the working of co-operative societies.

These are in brief the most important amendments in the legislation

on co-operative societies made by the law of 1921. In this article we have not taken account of that law, as it is not yet in force.

§ 3. THE GENERAL PROGRESS OF CO-OPERATION FROM 1900 TO 1920.

To complete our study of the legislation relating to co-operative societies and of their organization we here give some statistics of the general progress of co-operation in Japan during the twenty years following the promulgation of the law on co-operative societies.

Table I (page 416) contains a summary of the principal statistics respecting the development of co-operative societies in the years 1900-1920, showing the constant progress of co-operation, and its relation to the various amendments to the law.

As stated above, in speaking of the four classes of co-operative societies recognised by the law, a co-operative society may carry on at the same time work characteristic of more than one class.

On the basis of this legal permission, co-operative societies are divided into 15 kinds according to the business they undertake, as shown in Table II (page 417), which gives the progress, for the years 1908-1919, of co-operative societies divided according to the branch of business carried on by them

TABLE I — Number of Co-operative Societies, Number of Federations of Co-operative Societies, Number of Members, Amount of Capital, Number of Members of the Central Co-operative Union, Number of Branches of the Central Co-operative Union

Year	Number of co oper- ative societies	Number of Federa- tions of co oper- ative societies	Number of members of co operative societies	Total amount of capital	Number of mem- bers of the Cent- ral Union of Co oper- ative Societies	Number of bran- ches	Remarks
				yen			
1900							Law No 34 of 1900 on co-operative societies
1901	263	—					
1902	512	—					
1903	870	—	66,730	2,164,517			
1904	1,232	—	93,632	3,174,221			
1905	1,671	—	137,022	4,559,651	828		Union of Co operative societies
1906	2,470	—	224,770	6,831,414	1,748	15	First amendment of the law on co operative societies
1907	3,363	—	312,759	11,507,447	2,570	21	
1908	4,391	—	493,010	16,525,363	3,577	26	
1909	5,651	—	631,590	23,477,066	4,996	29	Second amendment of the law on co-operative societies
	7,263	13	780,264	27,694,540	6,002	36	Modification of the constitution of the Central Union of Co operative Societies
1911	8,663	23	944,267	38,480,973	6,940	39	
1912	9,683	34	1,076,202	51,923,994	7,408	41	
1913	10,455	53	1,164,164	62,719,622	7,997	41	
1914	11,160	63	1,350,360	72,574,210	8,545	43	
1915	11,509	73	1,427,112	83,362,241	9,411	44	
1916	11,753	81	1,504,384	102,573,365	10,037	44	
1917	12,025	91	1,590,325	141,371,344	9,871	46	Third amendment of the law on co-operative societies
1918	12,523	100	1,878,450	213,707,917	10,477	46	
1919	13,106	123	1,965,900	224,360,924	11,172	46	
1920 (Sept.)	13,474	146	—	—	—	—	

Table III shows the progress of co-operative societies for the period 1903-1918, classified according to the form of liability adopted. It is worth noting that the number of co-operative societies formed on the basis of limited liability is constantly increasing: in fact, while in 1918 it represented only 47 per cent., in 1918 it reached 71.1 per cent.

TABLE III. — *Number of Co-operative Societies Classified according to the Form of Liability Adopted.*

Year	Limited liability	Unlimited liability	Guaranteed liability	Total	Percentage		
					Limited liability	Unlimited liability	Guaranteed liability
1908 . . .	2,089	2,214	88	4,391	47.6	50.4	2.0
1909 . . .	2,917	2,637	136	5,690	51.3	46.3	2.4
1910 . . .	4,204	2,938	166	7,308	57.5	40.2	2.3
1911 . . .	5,235	3,235	193	8,663	60.4	37.4	2.2
1912 . . .	6,105	3,368	210	9,683	63.0	34.8	2.2
1913 . . .	6,805	3,430	220	10,455	65.1	32.8	2.1
1914 . . .	7,333	3,602	225	11,160	65.7	32.3	2.0
1915 . . .	7,633	3,646	230	11,509	66.3	31.7	2.0
1916 . . .	8,047	3,460	246	11,753	68.5	29.4	2.1
1917 . . .	8,393	3,376	256	12,025	69.8	28.1	2.1
1918 . . .	8,987	3,269	267	12,523	71.1	26.8	2.1

In Table IV (page 419) the statistics of Table II are grouped according to the four classes of co-operative society recognized by the law. That is, the co-operative societies are considered and classified, not as single societies carrying on one single kind of business, but according to each class of business carried on by them. Thus under the heading of co-operative credit societies are included not only co-operative societies which devote themselves solely to credit transactions, but also those which at the same time carry on other classes of business and figure also under other headings. Thus for instance, a co-operative society for credit, purchase, sale and production is classified under all four headings, thus figuring four times, because in reality it carries on four class of business transactions. Under this system the number of co-operative societies amounted to 25,736 in 1917, although the real number was only 12,025. This means that 12,025 co-operative societies carried on 25,736 branches of business, distributed according to the four classes recognised by law.

This method of grouping allows the percentage of the transactions carried out to be determined, showing the degree of development attained by each kind of business according to which the co-operative society is classified by the law.

TABLE IV. — *Classification of Co-operative Societies according to the Kind of Business Carried on.*

Year	Co-operative credit societies (including those which also carry on other kinds of business)	Co-operative societies for the sale of produce (including those which also carry on other kinds of business)	Co-operative societies for the purchase of requisites (including those which also carry on other kinds of business)	Co-operative productive societies (including those which also carry on other kinds of business)	Total
1908.	2,681	1,336	2,273	537	6,827
1909.	3,823	1,989	3,292	738	9,842
1910.	5,331	2,904	4,242	908	13,385
1911.	6,566	3,495	5,208	1,102	16,371
1912.	7,736	4,109	6,086	1,280	19,211
1913.	8,530	4,537	6,710	1,461	21,238
1914.	7,274	4,885	7,244	1,599	23,002
1915.	9,738	5,110	7,457	1,673	23,978
1916.	10,197	5,271	7,661	1,755	24,884
1917.	10,490	5,547	7,854	1,845	25,736
Percentage (end of 1917) of the total number of businesses carried on by co-operative societies . . .	40.8	21.5	30.5	7.2	100.0
Proportion of number of co-operative societies included in each class, with respect to the real number of societies at the end of 1917 (12,025)	87.2	46.1	65.3	15.3	—

The wide diffusion of co-operative societies throughout the territory of the Empire is made evident by Table V (page 420) which gives the proportion between the total number of co-operative societies and the number of cities, towns and villages. In the ten years 1908-1917 this proportion has increased from 35.2 per cent. to 98 per cent., showing a constant and rapid increase of the movement, also with regard to the distribution among the regions of the country.

The great increase of the co-operative movement in Japan is not merely the result of the increased number of co-operative societies; but it is also owing to the constant increase both of the total and average number of members, as well as of the number of shares subscribed for. Table VI (page 420) shows these statistics for the years 1907-16. In Table VII (page 421) the whole number of members at the end of 1916 is classified according to the various kinds of co-operative societies to which they belong.

The particulars given in Table VII are elaborated in Table VIII (page 421) according to the system of classification already explained for Table IV. That is, the co-operative societies are considered in their actual number, but on the basis of the four classes of business transactions carried on by them. Thus a member of a co-operative society for credit, sale, purchase,

TABLE V. — *Proportion between the Number of Co-operative Societies and the Number of Cities, Towns, and Villages.*

Year	Number of co-operative societies	Number of cities, towns and villages	Percentages
1908	4,391	12,453	35.3
1909	5,690	12,395	45.9
1910	7,308	12,393	59.0
1911	8,663	12,388	69.9
1912	9,683	12,382	78.2
1913	10,455	12,354	84.6
1914	11,160	12,342	90.4
1915	11,509	12,329	93.3
1916	11,753	12,292	95.6
1917	12,025	12,276	98.0

TABLE VI. — *Number of Members and of Shares.*

Year	Number of co-operative societies investigated	Number of members	Average number of members per co-operative society	Number of shares	Average number of shares per member
1907	1,623	151,123	93	319,840	2.1
1908	2,598	284,654	110	586,994	2.1
1909	3,528	392,411	111	782,203	2.0
1910	4,922	534,085	109	1,071,892	2.0
1911	6,650	722,089	109	1,441,128	2.2
1912	8,494	945,578	111	1,887,981	2.0
1913	9,328	1,090,475	117	2,177,010	2.0
1914	9,967	1,204,232	121	2,399,085	2.0
1915	10,374	1,288,984	124	2,567,046	2.0
1916	10,587	1,357,502	128	2,711,289	2.0

and production, is considered as belonging to all four classes, and he does in reality carry on all four business transactions recognised by the law, while belonging only to one co-operative society.

From Table VIII it appears that out of the whole number of members, 1,357,502, there are 1,228,009 members who carry on credit transactions, this class attaining a higher number than any of the others.

TABLE VII. — *Number of Members of Co-operative Societies Classified according to the Kind of Society to which they belong (Position at the end of 1916).*

Kind of co-operative society	Number of co operative societies investigated	Number of members	Average number of members per co-operative society
Co-operative credit societies	2,863	402,533	141
Co-operative societies for sale of produce	165	17,167	104
Co-operative societies for purchase of requisites .	364	47,311	130
Co-operative productive societies	98	7,788	79
Co-operative societies for sale and purchase . .	328	34,390	105
Co-operative societies for sale and production . .	99	6,354	64
Co-operative societies for purchase and production	25	2,215	89
Co-operative societies for sale, purchase, and pro- duction	144	14,268	99
Co-operative societies for credit and sale .	328	34,941	107
Co-operative societies for credit and purchase . .	2,462	284,770	116
Co-operative societies for credit and production .	50	4,037	45
Co-operative societies for credit, sale, and pur- chase.	2,572	344,738	134
Co-operative societies for credit, sale and pro- duction.	122	18,715	154
Co-operative societies for credit, purchase and production,	50	3,871	77
Co-operative societies for credit, sale, purchase and production	917	134,354	147
Total . . .	10,587	1,357,562	128

TABLE VIII. — *Number of Members Classified according to Class of Business Carried on (Position at the end of 1916).*

Co-operative credit societies (including those which also carry on other kinds of business)	Co-operative societies for the sale of produce (including those which also carry on other kinds of business)	Co-operative societies for the purchase of requisites (including those which also carry on other kinds of business)	Co-operative productive societies (including those which also carry on other kinds of business)
1,228,009	604,477	865,917	191,652

Table IX (page 422) shows the total number of members for 1916 classified according to their occupations. It is to be noted that there is a higher percentage of agriculturists than of any others; they represent the great majority of the total number and give a generally agricultural character to the whole co-operative movement in Japan.

TABLE IX. — *Members Classified according to Occupation*
(Position at the end of 1916).

Occupation	Number of co-operative societies investigated	Number of members	Percentage
Agriculturists	10,587	1,124,506	82.9
Artisans		53,084	3.9
Shopkeepers.		91,172	6.7
Fishermen		22,205	1.6
Woodmen		1,238	0.1
Other occupations		65,297	4.8
Total		1,357,502	100

Table X enables us to compare the total number of members with that of families existing in 1916. It shows that for each member there are 7.4 families. The proportion increases considerably if we consider only the agriculturist members as compared with families of agriculturists. This will show that for every agriculturist member there are 4.9 families.

The figures given in Table X show that though the co-operative movement in Japan has reached a high state of development there is scope for further progress and still wider diffusion.

TABLE X. — *Proportion between the Number of Members*
and that of Families (Position at the end of 1916).

Number of members	Number of families	Number of families per member	Number of agriculturist members	Number of families of agriculturists	Number of families of agriculturists per agriculturist member
1,357,502	9,996,194	7.4	1,124,506	5,541,612	4.9

Table XI gives details of the working capital for 1916. In Table VI we have already seen that at the end of 1916 of 10,587 co-operative societies examined, the number of shares was 2,711,289, with an average of 2 shares per member.

Now Table XI (page 423) gives a partial total comprising the entire amount of shares paid up, of the reserve funds, both ordinary and special, and of the loans contracted; and a general total, which adds to this working capital of all classes of co-operative societies, the total amount of

the savings deposited in co-operative credit societies. These totals are compared with those of 1915 and finally completed with a statement of the profits for the two years in question.

TABLE XI. — *Capital of the Societies (including Profits)*
(Position at the end of 1916).

	Amount	Number of co-operative societies examined	Average amount per co-operative society	Number of members of the societies examined	Average per member
	yen		yen		yen
Paid up capital	24,488,688	10.587	2,313,090	1,357,502	18,040
Reserve funds	10,010,610	10.587	945,556	1,357,502	7,374
Loans contracted	14,975,106	10.587	1,414,481	1,357,502	11,031
Partial total	49,474,404	—	4,673,127	—	36,445
Deposits	43,670,205	9.363	4,664,125	1,228,009	35,562
General total	93,144,609	—	9,337,252	—	72,007
Partial total for 1915	46,401,014	—	4,472,818	—	35,998
General total for 1915	76,000,173	—	7,747,061	—	61,652
Surplus for 1916	3,443,824	10.587	325,288	1,357,502	2,537
Surplus for 1915	2,895,868	10.374	279,147	1,288,984	2,251

(To be continued).

UNITED STATES.

A NATIONAL CO-OPERATIVE WHEAT MARKETING SCHEME.

SOURCES:

Grain Growers' Guide, Vol. XIII, No. 31 and Vol. XIV, Nos. 7, 9, 11, 16, 17 and 18. Winnipeg (Canada), 4 August 1920 and 16 February, 2 and 16 March, 20 and 27 April and 4 May 1921.

Agricultural Journal, Vol. 5, No. 11. Victoria (Canada), January 1921.

Banker-Farmer, Vol. VIII, Nos 2 and 6. Champaign (Illinois), January and May 1921.

Co-operation in the marketing of grain has hitherto taken the form of farmers' elevators, of which some 4,000 have been built. Most of these undertakings are, however, purely local and there are few farmers' companies operating on a large scale. The farmers' elevators have certainly benefited the grower by the savings they have effected and by the steadying influence upon local prices, but they have had little effect upon the general prices of grain in the United States. These prices are determined in a few large centres of distribution, known as terminal markets. The market places at these terminals are owned, operated and maintained by private closed corporations or associations known as "grain exchanges"

or "boards of trade." An examination of the rules governing these associations shows that elevator companies distributing their earnings on a basis of patronage cannot become members. The effect of this is the exclusion of the growers' organizations.

The grain exchanges furnish the facilities by which speculation in grain and its products is carried on. The wheat sold each year in the wheat pit of the Chicago Board of Trade is stated to be three times the entire production of the world. The total grain sold on the Chicago Board of Trade annually is approximately 51 times the amount of grain actually shipped to the Chicago market. The credit facilities of the country, too, are designed to meet the needs of business, with its quick turnover, and do not adequately take care of the farmers' needs. It is often difficult for the farmer to secure sufficient credit to permit the orderly marketing of grain. This difficulty results in wide fluctuations in prices.

§ 1. ORIGIN OF THE NATIONAL SCHEME.

To remedy this state of affairs the wheat growers of the leading wheat growing districts of the United States commenced to draw up plans for the co-operative marketing of wheat and other grain. The first move in this direction was made in the State of Washington at the beginning of 1920. It was decided at the annual meeting of the Washington Farmers' Union, held in Spokane, to form an association covering the wheat-growing sections of Eastern Washington and Oregon and Idaho for the co-operative marketing of wheat. Other Unions soon followed suit.

Meanwhile the farmers of the great wheat-growing states from Texas north to the Dakotas had been busy, and the project of a national co-operative wheat marketing scheme was taken in hand. The movement began in a crop marketing conference called at the instance of the American Farm Bureau Federation. This meeting was held in Chicago in July 1920. The result of the conference was that the President of the Farm Bureau Federation was empowered to appoint a "Committee of Seventeen" composed of representatives of existing farmers' companies, to draft a plan for the co-operative marketing of grain.

The Committee of Seventeen at once started its investigations, and after months of patient work its plan was announced in February 1921. Meetings were then held in over 20 states. At these meetings the plan was explained by members of the committee, and delegates, apportioned to the states in proportion to the grain marketed, were appointed. The delegates met at a ratification conference in Chicago on 6 April 1921, to accept, amend, or reject the plan. After a two-day debate the plan was adopted by a vote of 62 to 38.

§ 2. THE UNITED STATES GRAIN GROWERS, INCORPORATED.

From this beginning sprang a national association, The United States Grain Growers, Incorporated, a non-capital, non-profit institution formed for the purpose of marketing the grain crops of America.

The three fundamental factors in the proposed system are : (1) the grain growers, (2) the local co-operative elevator company or grain growers' association, (3) the U. S. Grain Growers, Inc. The term "grain grower" includes any person who raises grain, and any land owner who receives all or part of his rent in grain. In order to take advantage of the new marketing system the farmer must : (1) join the U. S. Grain Growers, Inc., paying the membership fee, which is \$10 for a five years membership, or when his financial position demands it, arranging that it shall be deducted out of his first year's returns ; (2) sign a contract to deliver all his surplus grain to the local elevator company or grain growers' association for a period of five years.

The existing farmers' elevator companies which have done so much valuable pioneer work in co-operative grain marketing, will be made an integral part of the system if they meet the following requirements : (1) they must be truly co-operative ; (2) stock must be available at a reasonable price to every grower in the territory ; (3) stock ownership must be limited to grain growers ; (4) stockholders will probably be required to become members of the U. S. Grain Growers, Inc., which, for the sake of brevity will be called the Central.

A reasonable time will be allowed for elevator companies to make the readjustments necessary to meet these requirements. Where there are no farmers' elevators local grain growers' associations will be formed. These will provide facilities for handling grain at local points by making arrangements with elevators or by leasing, buying or building elevators or warehouses.

§ 3. METHODS OF MARKETING GRAIN.

The grower has three options as to how his grain shall be sold. One of these is the individual sales method. He may sell direct to the local organization or may consign his grain to the Central for outright sale. Under this option he will exercise the same selling rights over his grain as he does at present with his elevator company, except that he is bound to deliver all his marketed grain to the organization by the terms of the contract.

The second option is the pooling system. The plan provides that the farmers themselves may elect to pool their grain to any extent that they wish. They may form a local pool. In this case they appoint a local pooling committee which shall have complete control over the handling, shipping and selling of the pooled grain. The grain must, however, be marketed through the Central. The power of handling a local pool may, if the growers so elect, be delegated to the elevator company or other agency on condition that the grain be marketed through the Central.

Provision is also made for the formation by local associations of joint pools. The selling of the grain in a joint pool is under the control of a joint pooling committee representative of the growers contributing the grain, but with power to delegate its authority to the Central. This would probably be the course adopted. The handling and shipping of the grain

destined to a joint pool is looked after by the local committee, but the selling is done by the joint committee or the Central, which has power to order the grain in local pools to be moved forward. Pooling is, of course, by grade. An advance is made at the time of delivery and the balance pro-rated to the local committees, who in turn pro-rate to the individual growers. The manner in which it is proposed to finance these transactions will be explained later.

The third method of sale is by the partial wheat pool. The grower may elect to pool one third of his wheat crop that is marketed, subject to the provisions relative to the local and joint pools previously mentioned, and can sell the balance of his wheat crop to or through the elevator company as is stated in the first option.

The relations between the local farmers' elevator company or grain growers' association with the U. S. Grain Growers, Inc., are as follows: (1) it will sign a contract with the Central agreeing to deliver to it all its surplus grain for sale for a period of five years; (2) it may ship its grain to the Central on consignment, in which case determination of time and place of sale will rest with the local elevator company or grain growers' association. The Central will sell the grain to the best possible advantage when received and remit the proceeds, less selling costs, to the local elevator company or grain growers' association.

§ 4. ORGANIZATION AND FINANCE OF THE NATIONAL ASSOCIATION.

It is proposed that the members of the association be grouped into voting units, with headquarters at shipping points. The members who are the patrons of a local elevator company or grain growers' association constitute a voting unit. Each member has one vote, and no one can belong to more than one voting unit. The annual meeting is held on the first Tuesday of February, when a delegate is elected to a congressional district convention. At a district convention which is called two weeks after the local annual meetings, each delegate casts one vote for each member of the local voting unit which he represents. The district conventions each elect one delegate to a national convention. The national convention, which meets each year in Chicago is the supreme council of the U. S. Grain Growers, Inc. It meets on the third Tuesday in March. The national delegates each vote the aggregate membership of the districts which they represent.

At the national convention the board of directors of the association is elected. It consists of 21 members, elected for two years, approximately half of them being elected at each annual convention. Provision is made that the board of directors may provide for the election of directors by districts on an equitable basis. All directors must be members of the U. S. Grain Growers, Inc., that is, they must be actual growers of grain marketed through it.

The directors have the full powers generally exercised by such a board, including the filling of vacancies in their number for unexpired terms

until the next national convention. It elects the officers of the association, who consist of president, three vice-presidents, secretary and treasurer. The last two need not necessarily be members of the association.

The board of directors have divided the company into eight departments, each with definite functions to perform. Each is administered by a committee of from three to five directors. The president of the association is *ex-officio* a member of each committee. The departments are: organization, financial, sales, pooling, statistical, legal, transportation, and information.

In planning organization work it is proposed to consult the directors from each district, so that local conditions can be taken into consideration. This is particularly necessary where there are already local co-operative selling organizations. The general plan of the campaign to secure membership will be a farm-to-farm canvass, and the state and county farm bureaux are expected to give local assistance in organizing.

The financing of the activities of the association on a large scale will call for the organization of a subsidiary corporation. The maximum which the association itself can borrow has been fixed at one million dollars. A rough outline of the financing of the proposition is as follows: There is, first, the membership fee, which has already been dealt with. Various subsidiary corporations will be organized, the ordinary stock being held by the association, which will thereby control them. Preferred stock will be issued, and this will be offered to farmers. It will bear 6 per cent. interest. The preferred stock, which may run into millions of dollars, will be paid off by means of deductions made each year from each farmer's returns. By a provision in the contract each farmer agrees that one per cent. of his gross returns may be retained by the association each year, the moneys thus deducted being utilized in providing working capital and in acquiring the ownership of assets through the subsidiary corporations. If the plan succeeds on a large scale this will probably mean that ten million dollars a year will be put together for the acquisition of handling facilities and other purposes of the association. Credits during periods of heavy crop movements will have to be arranged, the security offered being the assets of the subsidiary corporations, the contracts with the farmers, and the actual grain held in store by the association. A unique feature in connection with the deductions is that the farmers will receive no personal claim on the assets of the association or subsidiary corporations. The idea is to build up a big system that will be free from interest charges. The articles of incorporation require that provision shall be made for the disposal of assets in case of the liquidation of the association's affairs, and it is provided that in such a case the distribution will be to the then existing contract holders.

The mode of operation of the sales department is as follows: The entire grain-producing territory of the country will be divided into zones according to commercial and transportation lines, with a general sales office in each zone. Such additional branch offices as may be necessary by the conditions of the domestic grain trade can be provided. Each

zone office will only handle such grain as naturally comes to the market where it is established.

The general sales offices contemplated will be located at Spokane (Washington), St. Paul and Minneapolis (Minnesota), Omaha (Nebraska), Kansas City (Missouri), Fort Worth (Texas), Chicago (Illinois), Cleveland (Ohio), and New York City. The last-named office will be established chiefly for the purpose of getting into touch with the export trade. It is probable that a general zone sales office will not be established at any point until approximately 25,000,000 bushels of grain have been contracted for in the trade territory tributary to that market.

On the work of the other departments it is not necessary to speak at length. Their names indicate the nature of the work of which they will have charge.

The subsidiary companies formed for the purposes of the association will include corporations for warehousing, exporting, and financing, and any other purpose deemed necessary by the board of directors. The warehousing corporation will, it is expected, confine itself chiefly to the acquisition of terminal facilities. The farmers' companies now control very little terminal space, and it is proposed to hire, purchase, or, if necessary, build terminals.

At present the plan, as far as it has matured, does not include the centralized ownership of country elevators. It is proposed that such elevators, apart from those now owned by some of the larger companies which have lines of elevators, shall be owned and managed locally.

Part II: Insurance and Thrift

MISCELLANEOUS INFORMATION RELATING TO INSURANCE AND THRIFT.

GERMANY.

INSURANCE AGAINST AGRICULTURAL STRIKES. — MARCK (*v. Geheimer Justizrat, ordent. Honorar professor, Syndicus der Greifswalder Versicherungs-Gesellschaft*): *Landwirtschaftliche Streikversicherung*. Berlin, 1921.

The *Landwirtschaftliche Versicherungsgesellschaft auf Gegenseitigkeit* of Greifswald has been in existence for 80 years, and with an assured capital amounting altogether to 2,750,000,000 marks carries on five branches of insurance — hail, fire, deterioration of buildings by time, theft, damage by riots. On 11 June 1920 a sixth branch was added: insurance against agricultural strikes. The new section will be managed in common with the others, but its assets and its accounts must be kept separate; it must also have its own reserve funds. This initiative and the conditions of insurance against strikes have been sanctioned by the *Reichsaufsichtsamt*. In order that the new section might from the beginning be placed on a firm basis, the old sections have supplied it with a reserve fund of 300,000 marks. It will begin business as soon as at least 1000 persons desire insurance.

Although the society is authorized to work throughout the Empire, it confines itself, in fact, generally to the plain of North Germany — Pomerania, Brandenburg and Mecklenburg — where large estates predominate, and the cultivation of cereals prevails, with its geographical centre in Greifswald. It is thought that insurance against strikes will become general in these provinces and also in the districts of the former province of West Prussia which adjoin Pomerania, and particularly those agriculturists who are registered in at least one of the old sections will avail themselves of it. Individual cases in this branch of insurance are regulated by the president and officers and general exceptions are decided by the Council of Supervision. The basis of a decision, whether as regards insurance or compensation for damages, must be exclusively the amount of the wages; values and damages apart from this basis are not taken into consideration. Taking into account the fact that an agricultural strike cannot as a rule exceed a certain length of time, two-twelfths of the annual amount of the wages are taken as the basis of the amount of the insurance; when it is for periods especially dangerous — for the season of sowing or of harvesting — or for an acute form of strike (with abandonment of urgent work in the care of live stock, etc.) another

twelfth is added. The policy-holder must declare for each farm the annual amount of wages paid in the previous year (beginning from 1 July) taking into account both payments in cash and those in kind of whatever nature calculated at their real value. By dividing the total annual amount of wages by the total number of working-days, the average daily amount of wages is obtained. This only is taken into account in the insurance, leaving out the nature and the description of the occupation of individual labourers. The policy-holder may choose whether he will insure an equal average day for all periods of the year, or whether, in consideration of the difference in the gravity of the damage according to the season in which the strike occurs, he prefers to indicate certain periods for which he may require a higher compensation. There can be no insurance against a strike unless it lasts two entire consecutive days and involves at least one-fourth of the labourers on the farm. The premiums are fixed in proportion to the whole sum required to cover the compensation. They must be in one single payment, to be effected at one single time for each period of insurance. There are to be no special payments of any kind. The collection of the premiums is deferred and the settlement takes place for the whole financial year from 1 October to 30 September. This is the insurance period.

The society is exempt from the obligation to pay compensation if the policy-holder has provoked the strike deliberately or through his own fault. This is not only a natural social rule, but is at the same time a guarantee for those members who perform their duty towards their workmen and to society and who therefore should not be involved in a common responsibility with members who are in fault.

ITALY

1. THE DEVELOPMENT OF INSURANCE IN 1919 — BACCHI (Riccioni): *L'Italia economica* nel 1919. Città di Castello, 1920

In 1919 the development of insurance in Italy was actively taking place. With regard to this question certain notable facts have been observed to which the Year Book "*L'Italia economica*" calls special attention. Selecting those which are of special interest for agriculture, we may mention the fact that in that year, chiefly through the active propaganda of the *Istituto Nazionale della Mutualità Agraria*, the movement for the development of rural insurance was intensified.

In consequence of the serious losses caused by the wide diffusion of cattle disease in 1918-19, the idea of the expediency of making cattle insurance compulsory was widely supported. A powerful impulse to a general and organic development of agricultural mutual insurance was given by the Royal Decree of 2 September 1919, No. 1,759 (1), which laid down a new basis for it. It regulates those insurance societies the object of which is to give compensation for damages resulting from every kind

(1) See on this subject the article in our issue of July 1920.

of agricultural risk. To enjoy the advantages given by the law, such societies must be organized and administered according to the principles of mutuality; they must, therefore, not propose to themselves any purpose of gain, and their area of operations must as a rule be only the commune in which they have their headquarters, so as to facilitate reciprocal supervision among the members. The legal recognition of mutual societies is made simply by a decree of the prefect; there are also fiscal privileges and grants for initial expenses. As the communal mutual societies with their limited area of operations could only with difficulty carry on insurance of risks so variable and so unequally distributed, the decree enjoins the grouping of mutual societies in provincial federations, re-insured with the *Istituto Nazionale delle Assicurazioni*, or with private undertakings.

As regards social insurance, during the year 1919 regulations were definitely adopted for compulsory insurance against invalidity and old age (1) and against unemployment (2) while compulsory insurance against agricultural accidents came into force (3), and the enquiry as to compulsory insurance against sickness was concluded. With the speedy introduction of this form of insurance, and the extended application of the other forms, Italy will have a vast system of compulsory insurance, affecting the whole of the working population.

Insurance against invalidity and old age, introduced into Italy by the Lieutenantcy Decree of 21 April 1919, No. 603, is, it must be remembered, compulsory, not only for paid workmen properly so-called, but also for the cultivators of land, for produce-sharing tenants, for small tenants and small employees, that is for about 10 million persons, or 45 per cent. of the population above the age of 15 years. This is exclusive of certain classes of persons in an economic condition similar to that of persons compulsorily insured, but who are working on their own account independently of others; but these are admitted to voluntary insurance, always with State support. The idea of mere assistance on the part of the State having been rejected, it is provided that the insurance shall rest on a three-fold contribution (from the workman, the employer and the State). The State contribution is a supplement of 100 lire to the annual pension paid to every insured person. Instead of the system of individual premiums that of average premiums has been adopted, which is more simple and has for its basis, not the single individuals insured, but the whole mass of insured persons; this system has been found possible and convenient because when compulsory insurance is established in a fixed form and measure the general carrying on of the business takes place in a manner easily to be foreseen for the various groups of insured persons. The contributions are fixed in a proportion varying with the amount of the remuneration and graduated according to a simple scale; they vary

(1) See the article in our issue of November-December 1919.

(2) See the article in our issue of April 1920.

(3) See on this subject the article in our issue of March 1919.

from 4 to 5 per cent. of the yearly wages, and are paid half by the employers and half by the workers. The pension (with the exception of the uniform supplement of 100 liras paid by the State) is based on the payments made. The right to it is recognized at the age of 65, provided that at least 240 fortnightly contributions have been paid (10 full years of insurance), and at any age in the case of permanent invalidity, if at least 120 contributions have been paid. Besides old age pensions, there are grants to the widow and orphans of an insured man who dies before the pension becomes due, and there are measures contemplated in view of invalidity.

The carrying out of the insurance is entrusted to the *Cassa nazionale per le assicurazioni sociali* (formerly the *Cassa nazionale di previdenza*). As a rule in every province a social insurance institution has been formed, to serve as a link between the central organization on the one hand and the insured persons and the employers of labour on the other, for purposes of inspection and for various other purposes connected with the application of the Law.

In the year now under consideration compulsory insurance against unemployment was introduced into Italy by a Decree of 19 October, No. 2,214, as a substitute for the system of grants, which had not proved satisfactory. According to this Decree, by which unemployment was regarded as a social risk, the payment of the contributions required to assure unemployment benefit is divided amongst the working classes, the employers of labour and the State, in the same way as for the risk of invalidity. This insurance is compulsory for workmen in the employment of others, whether paid by piece-work or receiving fixed wages, whatever be the amount of the wages, as also for those not working for a private undertaking, whose wages do not exceed 350 lire per month; those are exempt from the obligation whose age is under 15 or over 65, as well as certain classes of workmen who run little or no risk of unemployment, or for whom the meaning of unemployment would be difficult to determine.

The organization of this form of insurance is wisely co-ordinated with that of the labour exchanges: by means of contributions from employers and workmen and a grant from the State, a national fund has been formed in the National Employment Bureau to provide against involuntary unemployment. The contributions are calculated by the day, the week or the fortnight, and are divided into three classes of payment (up to 4 liras, from 4 to 8 liras and above 8 liras per day); there is a fixed proportion for each class (respectively 6, 12 and 18 centesimi per day, that is, about 2 per cent. of the wages) based solely on the amount of the remuneration. The organization rests on mixed banks established in every province and managed by the Provincial Employment Committee, but the special banks formed by trade organizations or by agreement between employers and workmen may also be authorized to carry on this form of insurance. For the payment of contributions the system of pass-books and stamps is adopted; the employers are responsible for the payment of contributions but may deduct half from the wages. No contributions are due

from workmen if involuntarily unemployed because of insufficiency of work. The unemployment banks pay the man out of work a daily sum of 1.25 liras, 2.50 liras or 3.75 liras according to the class of contribution paid by him. The workman is entitled to the grant from the eighth day of unemployment, but the grant must not be paid for more than 120 days in any one year. Only unemployment resulting from insufficiency of work gives the right to the benefit; unemployment due to labour disputes, to illness, etc., does not give the right to the benefit, nor does seasonal unemployment. Under normal circumstances this right cannot be claimed unless during the two preceding years at least 24 fortnightly contributions have been paid. The recognition of the conditions which give the right to the benefit is in the hands of the Provincial Employment Committee. To obtain the right a man who is out of work must present himself for registration at some organization for procuring employment on the day after his dismissal; if he prefers to seek work himself it is understood that he renounces the benefit. The man out of work loses the benefit if without sufficient reason he refuses suitable occupation offered him by an employment office.

The burden of this insurance rests on employers and workmen, but for the first four years the State has fixed an annual payment of 40 million liras.

Lastly, in 1919 a plan of insurance against sickness was proposed. This would be compulsory for the generality of working men; it would guarantee a sick benefit until recovery, or until a right to a pension for invalidity had been acquired; it would also guarantee medical aid to the insured persons, and to the payment of a small sum for funeral expenses in case of death. Contributions would be paid by workmen, by employers and by public bodies. The establishment of communal or intercommunal mutual insurance funds is under consideration. The system would in many respects resemble the system of insurance against old age.

Thus the provisions already in force for insurance against accidents in agriculture, invalidity, old age, and unemployment, when completed by provisions for insurance against illness and unemployment, will form a complete system of social insurance, which by degrees will become more co-ordinated and unified so as to effect the greatest economy in its general working, with considerable advantage to those who benefit by it.

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2. THE PROGRESS OF INSURANCE COMPANIES AND SOCIETIES IN RECENT YEARS. — *MOVIMENTO DELLE SOCIETÀ COMMERCIALI DAL 1° LUGLIO 1914 AL 31 DICEMBRE 1919. CENNI STATISTICI.* Ministero per l'Industria, il Commercio e il Lavoro. Direzione Generale del credito, della cooperazione e delle assicurazioni private. Rome, 1920.

From a statistical report recently compiled by the Ministry of Industry, Commerce and Labour we select some interesting particulars as to the development of Italian insurance companies in recent years. Ac-

According to a statement made in 1916, there were in that year 147 mutual insurance societies, and 48 ordinary insurance companies; the latter had capital amounting to 134,100,700 liras, of which 54,541,490 liras was paid up. The values assured by the mutual societies amounted to liras 8,483,63,200, and those assured by ordinary companies to 22,595,676,448 liras. The reserve funds of the mutual societies amounted to 19,548,352 liras, those of the companies to 30,707,597 liras.

Going back to 1914 we find that in that year there were 154 mutual societies and 36 ordinary insurance companies, having a subscribed capital of 119,975,700 liras, of which 51,126,490 liras was paid up. The difference between the figures for 1914 and those of 1916 is slight, but on the other hand there is a considerable difference between the subscribed and the paid up capital. This fact is explained by the nature of the undertakings, "which offer to their members the greatest and best of guarantees, not merely by their foundation capital, but also by their excellent organization and by their wise choice and wide distribution of risks."

Of the 147 mutual societies to which we have referred, 110 are local mutual societies working upon a number of risks not exceeding on the average half a million. For the most part these are scattered over the northern provinces of Italy, as will be seen from the following table, which shows the distribution among the various regions of the kingdom of local mutual societies and ordinary companies.

Regions	Mutual societies	Ordinary companies	Nominal capital of ordinary companies	Paid up capital
Piedmont	116	10	12,700,000	3,141,530
Lombardy	13	14	38,025,000	12,871,360
Liguria	3	11	40,650,000	6,425,000
Tuscany	4	3	35,500,000	29,000,000
Campania	3	3	550,000	230,000
Emilia	3	2	2,300,700	2,300,700
Venetia	4	—	—	—
Latium	1	4	4,350,000	570,900
Sicily	—	1	25,000	—
Total	147	48	134,100,700	54,541,490

Insurance societies and companies are thus more general in North Italy. In Liguria the ordinary companies deal chiefly insurance in connection with transport; in Piedmont, Lombardy, and Venetia with other branches, such as hail, fire and accidents.

During the period 1916 to 1918 the ordinary insurance companies were doubled in number, and the nominal capital almost trebled, rising from 134,100,700 liras to 301,846,600 liras. We shall now give a particulars as to the movement of capital invested in insurance societies or companies or withdrawn from them in the years from 1914 (latter half) to 1919.

Investment in and Withdrawal of Capital from Insurance Societies and Companies from 1914 to 1919.

Years	Number of societies and companies			Investment of capital	Withdrawal of capital	Difference
	formed	dissolved	difference			
Second half of 1914	3	5	- 2	650,000	11,075,000	10,425,000
1915	5	—	+ 5	7,350,000	275,000	+ 7,075,000
1916	3	2	+ 1	8,080,000	1,030,000	+ 7,050,000
1917	8	1	+ 7	37,120,900	1,300,000	+ 35,820,900
1918	34	—	+ 34	126,925,000	—	+ 126,925,000
1919	24	4	+ 16	59,100,000	17,470,000	+ 41,630,000

Except during the latter half of 1914, when there was a diminution in the existing capital, owing to the excess of withdrawals over investments — 650,000 liras as compared with 11,075,000 liras — due to the dissolution of five societies as compared with three formed, in all the other years there was a continual progress in insurance institutions. For the four years 1915 to 1918 the total amount of capital invested exceeded 179 millions, while the withdrawals amounted to less than 3 millions (2,605,000) through the dissolution of three societies and the diminution of the capital of five others. These withdrawals were made during the three years 1915-1917, because in 1918 there were none. Subtracting the amount of the withdrawals from that of the investments from the latter half of 1914 to 1918 we obtain 180,125,000 liras. Of this sum 160,245,900 liras were devoted to the foundation of 52 new societies, the remainder serving to increase the capital of nine existing societies.

The year 1919 as compared with 1918 shows a considerable decrease in the investments of capital; on the other hand withdrawals were effected for 17.4 millions, so that the net balance of investments (41.6 millions) amounted to about one-third of that of 1918, which, as shown in the table given above, amounted to nearly 127 millions.

According to the results of the inquiry made by the Ministry of Industry, Commerce and Labour, the profits made by the ordinary in-

surance companies in 1915 amounted to 8,403,229 liras, while the total losses were 58,888 liras. The profits were equivalent to 6.6 per cent. of the subscribed capital, and to 15.5 per cent. of the paid-up capital, that is, about one-seventh of the whole amount. The profits of the mutual societies in the same year amounted to 4,195,992 liras and their losses to 775,298 liras.

During the four years 1915 to 1918 the sum of 14,995,598 liras was paid as a dividend which in proportion to the paid up capital represents a profit of 7.9 per cent. for 1915, 8.5 per cent. for 1916, 7.9 per cent for 1917 and 9 per cent. for 1918. Lastly the total reserve funds correspond to about one-eighth of the paid-up capital.

Part III: Credit

CANADA.

RURAL CREDITS

By W. T. JACKMAN,

Professor of Economics, University of Toronto, Canada.

In the development of agriculture in Canada, a country which is pre dominantly agricultural, the same tendencies have been manifested as in most other countries ; and as agriculture is becoming rapidly a business, involving the application of business principles and practices, it is necessary to provide for those engaged in it such facilities for borrowing as will enable them to have their credit requirements satisfied according to their needs. In all countries it is recognized that the commercial banking systems are not adapted to the special conditions of agriculture and, consequently, there have come into operation institutions for meeting these requirements for rural credit. A brief description of the legislation in the various provinces of Canada under which organized credit facilities have been furnished to farmers will be given here in order to keep readers of the *Review* informed concerning this matter.

§ I. MANITOBA.

The *short-term* requirements are cared for under the Rural Credits Act, which was passed in 1917 and amended at a later time. This Act makes provision for the organization by farmers of rural credit societies, through which the individual shareholders of these societies may be enabled to borrow for productive purposes. The organization of such a society is initiated by not less than fifteen farmers drawing up a petition therefor addressed to the Lieutenant-Governor-in-Council and sent to the Provincial Secretary. This petition contains the names and addresses of the petitioners, the lands occupied by them, the name of the proposed society and its chief place of business, the amounts subscribed by each to the capital of the proposed society, the amount of the capital stock, the number of shares into which it is divided and the amount paid in on each subscription. As soon as the Provincial Secretary has satisfied himself in regard to the petition, the Lieutenant-Governor-in-Council may issue letters patent incorporating the society. The Government then names a secretary-treasurer to act until the organization has been completed, after which a permanent officer is chosen by the society. No society can commence business until it has re-

ceived subscriptions to its capital stock from at least thirty-five persons actually engaged or agreeing to engage within one year in farming operations. Each member of a society must subscribe for at least one share of stock and all stock subscriptions must be paid up to the amount of not less than 10 % before the society can undertake to do business. Co-operation with farmers is also provided by making it lawful for the Provincial Government and the municipality within which the members of the society are to carry on their operations to subscribe each for one-half as much stock as the aggregate of the individual subscribers. They, too, like the farmers pay 10 % of the value of their subscriptions. The board of directors of a society is composed of nine members, three elected by the individual subscribers, three by the municipal council and three by the Provincial Government. One of those appointed by the Government must be an officer of the Government devoting his time to agricultural work or instruction, and he is usually appointed on ten or more rural credit society boards in the locality, to insure uniformity and thoroughness in the management of the societies. The secretary-treasurer is the only paid officer of the board ; the others receive only their expenses.

The board of directors of a society meets two or three times a year, usually during the first four months of the year. Any member desiring a loan makes application to the secretary, stating the purpose or purposes of the loan and submitting a statement of his assets and liabilities. If the application is approved he is granted a line of credit for a year, and all the borrower's personal property of any kind, purchased, partly purchased or to be purchased with the proceeds of the loans, and all the returns from the investment of the loan, are thereby made subject to a lien in favor of the society and none of this personal property can be sold or removed from the borrower's premises during the continuance of the loan without the consent of the secretary of the society. Moreover, all proceeds from the sale of any of this property must be applied without delay toward the repayment of the loan. The lender of the money has not only this individual security but also the guarantee of the society which approved the loan, so that little risk is assumed in making the loan. The society, too, is protected by the provision that if the loan should, for any reason, become unsafe, or the borrower should have done or allowed to be done anything which is or would be detrimental to the loan security or contrary to the intent of the loan contract, the amount of the loan shall become due and payable, and the society may take possession of all property upon which it has a lien under the terms of the loan and sell this property in satisfaction of its claim.

The rate of interest payable by the borrower on such a loan must not exceed 7 % per annum, and out of the interest paid one-seventh is paid to the society by the lender as soon as the loan and all interest on it has been received. In case the borrower should not be able to repay the amount of his loan by the last day of December, the directors of the society may, upon sufficient reason, renew the loan for an additional period of not more than one year, but it must be clearly understood that the loan must be for some one or more of the productive purposes specified in the Act.

The rural credit society must invest the amount of its paid up capital stock in government bonds or bonds guaranteed by the government, or in municipal or school bonds. The returns received from this investment, together with the society's share of the interest paid by its borrowers, must be used to pay the necessary expenses of the society, after which a dividend not to exceed 6 % per annum may be disbursed on the paid-up stock, and the remainder must be transferred to a reserve fund which may, in the discretion of the directors, be invested in the same manner as the capital stock.

Until March 1920, the funds for these loans came from the banks, which furnished the advances to the societies at the rate of 6 %, and the societies charged the borrowers 7 %. But at that time a conference was held between the societies and the banks and the latter refused to furnish the societies with loans thenceforth at less than 6 ½ % interest. The societies refused to yield to the bank's demands for the higher rate, and, with the assistance of the Provincial Treasurer, legislation was passed in the course of a few days establishing the Provincial Savings Office. This institution is authorized to accept deposits from all sources and to pay interest (at present 4 %) on the same. These deposits, which are guaranteed by the Government, will be subject to withdrawal on demand, in the same way as the saving accounts in the chartered banks; and, as the banks are paying only three per cent. on such savings, it is indubitable that the Savings Office will attract large sums which would otherwise be deposited in the banks. Since the inauguration of this system in July 1920, through the head office and its three branches the net amount of savings has now (March 1921) passed the \$2,000,000 mark, so that its funds will soon be sufficient to meet all the demands for loans from the members of the rural credit societies.

Long-term or mortgage credit is provided in Manitoba through an Act passed in 1917, which created the Manitoba Farm Loans Association to act as the loaning agent between the Government and the farmers. The affairs of the association are managed by a Board of five members appointed by the Provincial Government. One of the members, known as the Commissioner of Manitoba Farm Loans, is the chief executive officer of the board, and of the other one may be nominated by the Union of Municipalities of the Province and one by the Grain Growers' Association. The capital stock of the association, \$1,000,000, is divided into 200,000 shares of \$5 each and the co-operative principle of the Act is shown by the fact that none but borrowers and the Government of the Province can own shares in the association. Every borrower must subscribe and pay cash for shares of stock in the association to the extent of 5 % of the amount of his loan; and when the loan is paid back the borrower's shares are surrendered and are paid off at par. All loans made by the association must be secured by a first mortgage and must be repaid on the amortization plan. All mortgages are taken for a thirty-year period, but a loan may be paid off at any annual payment date at or after the end of five years from the date of the mortgage. Loans are granted for amounts not to exceed in each case 50 % of the fair estimated value of the land mortgaged, together with the value of the improvement upon the land or those to be effected out of the pro-

ceeds of the loan ; but in no case must the loan to any one person be greater than \$10,000. These loans may be used only for acquiring land for agricultural purposes and paying off encumbrances on it, clearing and draining land, erecting farm buildings, purchasing live stock and implements, discharging liabilities incurred for the improvement of the land, and for any purpose calculated to increase the productivity of the land. If the loan should be employed for any other purpose or if it is not being used economically the board may demand the immediate repayment of the loan with interest.

The funds required for such loans were obtained, in the first place, by a contribution from the Provincial Treasury. In addition, the board is empowered to issue and sell 5 % bonds up to 90 % of its first mortgages, which are used as collateral security. These bonds must not exceed in the aggregate \$9,000,000, and the principal and interest are guaranteed by the Government. Then, too, the association was authorized to receive deposits of money and to act as a depository for any provincial, municipal or school district funds ; but as soon as the Provincial Savings Office, mentioned above, was established it took over all the provincial business of receiving savings deposits.

When payments are made by borrowers on their mortgage loans, that part of each payment which consists of interest must be credited to the revenue fund of the association and form part of its cash assets, out of which to pay interest on the association's bonds and other securities. The remainder must be credited to a reserve fund, out of which the expenses of conducting the business are to be paid before paying any dividends on the shares. That part of each payment which consists of principal must be placed in a sinking fund account to provide for the retirement of the bonds when due.

The success of the Manitoba systems of short-term and long-term credit has been amply attested. The figures showing the former may be seen in the following table :

Year	No. of societies	Total credits granted
1917	1	16,600
1918	10	215,581
1919	38	1,051,876
1920	58	2,066,000

Besides the fifty-eight societies in active operation there were twelve more in process of formation.

As to the results of the operation of the system of long-term loans, the following table will show what has been accomplished :

Period	Amount of loans paid out
March 1917 to 30 January 1918	\$2,000,950.00
30 November 1918 to 30 November 1919 . . .	1,220,000.00
30 November 1919 to 30 November 1920 . . .	1,300,700.00
Total . . .	<u>\$4,521,650.00</u>

From the beginning of the operation of the board up to 30 November 1920, the total surplus accumulated amounted to \$52,961.88, which was equivalent to a dividend of 11.4 % on the capital stock ; but the board has decided not to pay any dividends out of this surplus for the present time. During the three months following 30 November 1920, the sum of \$517,600 has been disbursed in loans ; so that up to 28 February 1921, the aggregate of the loans actually made was \$5,039,150 00.

§ 2. SASKATCHEWAN.

In Saskatchewan there has never been any legislation for the establishment of *short-term* credits for farmers, although there has been recently in certain parts of the Province a strong desire for some such system as that in Manitoba.

Concerning *long-term* credits, there was passed in 1917 " An Act to provide for Loans to Agriculturists upon the Security of Farm Mortgages. " This Act was similar to the corresponding Act for Manitoba. It created the Saskatchewan Farm Loans Board, composed of one commissioner and two other members appointed by the Government to have power to do all the business connected with lending money on farm property upon the security of first mortgages. Its loans were to be made for a term of thirty years and no loan was allowed in excess of 50 % of the board's valuation of the property offered as security. Repayment was to be on the amortization principle. In several respects the Saskatchewan Act differed from the Manitoba legislation, viz.,

1. No maximum was stated for any individual loan.

2. All the money for the board's purposes was to be provided by the Provincial Treasurer through the sale of bonds or other securities. The aggregate amount to be borrowed for this purpose must not exceed \$5,000,000.

3. The first mortgages received by the board were to be handed over to the Provincial Treasurer at least equal in value to and as security for the loans, and the bonds or other securities issued for purposes of this Act by the Treasurer must not exceed the aggregate of the mortgages held by the board. (In the case of Manitoba the bonds issued by the board must not exceed 90 % of the amount of the mortgages.)

In most other respects the Saskatchewan legislation follows closely that of her sister Province, and in both Provinces efforts were made to appeal to the people within the respective boundaries to invest in the bonds which were issued upon the mortgage security. The bonds or debentures issued in each case bore interest at 5 %. In Saskatchewan every campaign to sell the bonds showed that for every application for a bond there were four applications for loans, thus indicating the small supply of investment funds as compared with the demand for loans in that Province. In the three-year period 1917-1920, the Treasurer was able to find \$6,500,000 for the Farm Loan Board, and this amount had been loaned to the farmers at 6 ½ %. This provision had met only about one-third of the demands for such loans.

On these loans there was, on 1 January 1921, \$300,000 interest overdue, but of course, it must be remembered in partial extenuation of this fact that some parts of the Province have been destitute of crops for four successive years.

§ 3. ALBERTA.

This Province passed three Acts in 1917 for the purpose of aiding farmers, namely, The Live Stock Encouragement Act, commonly called the "Cow Bill," the Co-operative Credit Act and the Farm Loan Act.

Under the Live Stock Encouragement Act any five or more persons engaged in practical farming in the Province may form an association and may jointly apply to the Live Stock Commissioner for a loan the proceeds of which shall be used in purchasing cows and heifers; except that, upon the consent of the commissioner, part of the loan, not to exceed 10 %, may be used by one or more members of the association for the joint purchase of a pure-bred bull. Each member of the association may borrow up to \$500 for the purchase of stock, subject to the commissioner's approval as to the amount borrowed and the stock purchased. When the commissioner has approved the application for such a loan, the bank which is to make the loan after satisfying itself regarding the financial risk, takes from the association the joint and several promissory note of the members for a period not exceeding five years for the amount of the loan. This note is guaranteed by the Provincial Treasurer both as to principal and interest. The interest rate must not exceed 6 % and a dollar fee is collected from each member for every \$100 borrowed. The sale of the stock and their offspring is subject to the approval of the commissioner.

As the outcome of this Act there have been the following results up to 31 December 1919.

Year	No. of loans guaranteed	Amt. of loans guaranteed	No. of cattle purchased
1917	208	\$455,620.00	4,536
1918	258	552,880.00	8,329
1919	215	499,163.00	9,629
	681	1,507,663.00	22,494
Less unexpended balances . . .		30,350.38	

Total amount of money spent . . . 1,477,312.62

Up to 31 December 1919, there were arrears of interest due by borrowers amounting to \$18,162.35.

The Co-operative Credit Act, for making provision for short-term loans authorizes co-operative credit societies of the same organization as the rural credit societies of Manitoba. Participation of the municipality and of the Provincial Government is provided for under the same conditions as in

Manitoba, and there is the same joint guarantee of the loans obtained by the borrower. These loans are for the purpose of paying the cost of farming operations of all kinds, such as the purchase of seed, feed, implements and machinery, live stock, preparation for cultivation, etc. But the Alberta Act differs fundamentally from the Manitoba Act in that the rate of interest to be paid by the borrower is not a fixed rate paid by all borrowers but is decided by agreement between the society and the bank as lender. The interest rate must include, as in Manitoba, a proportion for carrying on the business of the society. While this Act has been in effect in Alberta for about four years very few societies have been formed and very little money has been loaned through them. Perhaps the higher rates of interest than in Manitoba and the uncertainty of the rate, together with the scarcity of capital for anything but the usual commercial requirements, has deterred the development of the societies.

The Alberta Farm Loan Act is not in operation. It was passed in April 1917 and as the United States, which had been the chief source of the Provincial Government's funds, soon entered into the war this reservoir of loanable funds was cut off and the Treasury of the Province was unable to obtain the capital at home. Excepting minor details, this Act, like the preceding, is modelled directly upon the same principles as the Manitoba Farm Loans Act and is to be administered, like the latter, by a board, called the Alberta Farm Loan Board, the executive officer of which shall be called the Commissioner of Farm Loans. He must devote the whole of his time to the work of the board. The loans must be made on first mortgages on farm lands which are free from all prior liens and encumbrances. The mortgage in each case shall be for thirty years and the repayment of the loan is on the amortization plan. The rate of interest charged to the borrowers must be enough to pay the interest payable by the board or the Provincial Treasury upon the money borrowed for this purpose, the cost of raising this money, and the expense of conducting the business of the board including the creation of a reserve fund. Loans must not exceed thirty per cent. of the appraised value of the land on which they are made; and not more than \$5,000 can be loaned to any one person. The entire scheme is arranged to have the same intimate connection with the Treasury as in the sister province.

§ 4. BRITISH COLUMBIA.

In this Province, under the "Land Settlement and Development Act" of 1917, with its amendments in 1918, 1919 and 1920, there was constituted the Land Settlement Board to carry out the provisions of the legislation. The Board is composed of not less than three members appointed by the Lieutenant-Governor-in-Council. To this board advances are made from the Provincial Treasury in such amounts and at such rates as in the Lieutenant-Governor in Council may direct. All money received or collected by the board under the Act must be paid into the Treasury and becomes thereby part of the Consolidated Revenue Fund of the Province. All net sur-

plus earnings of the board are placed in the Reserve Fund until the latter amounts to at least \$100,000 and out of this fund are paid any losses of operation.

The board may approve agricultural loans for any purpose which will maintain or increase agricultural or pastoral production, and may take as security for such loans first mortgages on agricultural land in British Columbia free from all encumbrances, other than interests vested in the Crown. It cannot loan upon the security of unsurveyed land. Before making any loan upon land, the board must be satisfied that the value of the security, based on agricultural productiveness, is satisfactory, that the loan is for a productive purpose, and that the borrower after paying all charges under the mortgage can make a fair profit from his investment of the loan in the land. To any one borrower the minimum loan is \$250 and the maximum \$10,000. Ordinarily the maximum loan shall not exceed 60 % of the appraised value of the land at the time of appraisal; but where the loan or any part of it is to be advanced by instalments for improving the land the maximum loan may be raised to 60 % of the appraised value of the land at the time the improvements are affected. Under all conditions the borrower must keep the buildings fully insured. The rate of interest on loans shall be arranged as nearly as possible by adding not over $1\frac{1}{2}$ % to the rate paid by the Government on its bonds sold to get the current funds for the board.

Two kinds of loans are made under this Act: long-dated loans, extending for 15, 20 or 25 years, repayable on the amortization principle, and short-dated loans, extending for not less than three nor more than ten years, repayable on such terms as the board may think fit. Such a short-term loan to an individual must not exceed \$5,000 but to certain associations to which the Act applies the loan in each case must not be more than \$10,000 and any such loan in excess of \$5,000 must be approved by Order in Council. Provision is made also for increasing the loan by such an additional amount as, with the principal sum owing on the mortgage, will not make up more than 60 % of the appraised value when the additional loan is applied for; and if such an increase in the loan is granted it must be secured by the execution of a memorandum of additional loan, after which the original mortgage shall apply to the aggregate loan. In the repayment of a loan the borrower may on any interest date pay one or more of the instalments in advance of maturity.

Another important power given to the board is found in no other province in Canada, but is an adaptation of Australasian and Californian practice, that is, the power to accept Crown lands or to buy land from private owners and develop it for agricultural or pastoral purposes. For developing such land the board has extensive authority to clear, fence, dyke and irrigate the land; to erect suitable buildings on it; to build roads and bridges for it; to make explosives for use or for sale for the purposes of clearing the land; and to have the powers of a landowner in using the land, in buying and selling live stock and other essentials for agricultural operation, in selling, leasing or exchanging the land, etc. With the consent of the Lieutenant-Governor-in-Council, the board may make any subdivision of its lands which

it considers best for developing and settling them. Moreover, if, after investigation, the Board thinks that agricultural production is being retarded because of lands remaining undeveloped, it may establish a "settlement area" in any part of the Province. Within each settlement area the board shall appraise all lands at such value as the land would be taken in payment of a just debt from a solvent debtor. After every appraisal the board must send notice thereof to each owner of land in the settlement area, and these appraisals shall be the basis of the improvements to be made on the land by the owners, or else the basis of sale of the land. The regulations require owners of unimproved lands to inaugurate improvements within a specified time or render themselves liable to the penalty tax of 5 % of the appraised value in addition to other taxation. In 1920 development work has proceeded on ten areas. The total amount taken over by the government has been 121,141 acres, of which 46,647 acres have been surrendered to the board at a cost of about \$200,000 and 19,156 acres were resold to *bona fide* settlers, including 53 returned soldiers, each of whom secured the statutory rebate of \$500 on the purchase price of the land purchased. On 31 December 1920, the board had outstanding a total of 284 loans aggregating \$596,840 (1).

Finally, the board was to take over the functions exercised by the Agricultural Credit Commission, so far as this was possible; but as this organization is still in active operation we must consider its powers and its various activities. It was brought into existence under the "Agricultural Act, 1915," which became operative on 26 April 1916. This Act brings within its purview all the means for the development of agriculture within the province and makes a provision among other things for the establishment of a system of agricultural credit. For the administration of these agricultural loans there was formed the Agricultural Credit Commission, composed of a superintendent and four directors; the superintendent and two directors are appointed by the Lieutenant-Governor for ten years, and the other two directors are the deputy ministers of finance and agriculture.

The funds for loaning come partly from money appropriated by the legislative assembly and partly from the sale of securities. For the immediate necessity at first \$50,000 was appropriated from the consolidated revenue fund of the Province but this was to be repaid at a later time (2). The commission, with the approval of the Lieutenant-Governor-in-Council may issue securities for periods not exceeding thirty years at rates determined by the Minister of Finance. These debentures, guaranteed by the Province, are sold through the Minister of Finance and the proceeds are placed to the account of the commission. All the net earnings of the latter up to \$100,000 may be turned into a reserve fund which may be used to meet losses; and, of course, a sinking fund is established to provide for the redemption of the debentures at maturity.

(1) *Monetary Times*, 11 March 1921, p. 6.

(2) *International Review of Agricultural Economics* 1916, No. 9, p. 94; v. also 1917, No. 4, p. 70.

Loans may be made for the acquisition of land or for payment of encumbrances on this land ; for clearing land ; for dyking, irrigation or other provision for water ; for erecting farm buildings ; for purchasing machinery, live stock and, generally, for productive purposes. Each applicant for a loan must specify the purpose for which it is desired. The Commission may make loans of three kinds : long-term loans with a minimum of \$250 and a maximum of \$10,000 for individuals, for 20, 30 or 36 $\frac{1}{2}$ years, repayable principal and interest half-yearly on the amortization plan : short-term loans, for 3 to 10 years, varying in amount up to \$2,000 for an individual or \$10,000 for an association, and repayable on terms suitable to the commission though not necessarily on the amortization principle ; and single season loans, also amounting to \$2,000 for individuals and \$10,000 for associations repayable within twelve months. For any of these loans a first mortgage must be taken, and for the single season loan there must be given in addition a promissory note. In the repayment of an amortization loan before maturity, provision is made that additional sums of \$25 or any multiple of that amount may be paid on any interest-due date. If the borrower fails to observe the terms of his agreement in the use of or payments upon his loan, the commission may seize the security for the loan and dispose of it to the best advantage, or may lease the land for a term not exceeding ten years.

The rate of interest to be charged on a loan is not fixed, but it must not be more than 1 % per annum above the rate paid by the commission on the net amount realized from the sale of securities by which the loanable funds were obtained. In this way the rate is kept down to the lowest point, for since the debentures issued by the commission are guaranteed by the government they can be put out at the lowest possible rate and the borrowers can secure their loans at a correspondingly low rate of interest.

The period since this Act was passed has been one of great financial stress, as a result of the war, and it would not be expected that any large amount of loans would be granted. Yet in the first year and a half the commission granted 144 loans aggregating \$234,430 and up to the end of the year 1920 there had been a total of 385 loans granted, amounting in all to \$737,350. In each year since it began its duties the commission has shown a deficit in operation, but it will be noted from the following figures that this deficit has been greatly reduced in the last three years. The figures are for 1916, \$19,015 ; for 1917, \$22,200 ; for 1918, \$6,045 ; for 1919, \$7,744 ; for 1920, \$9,915 (1).

§ 5. ONTARIO.

Some partial measures of assistance to agriculture have been enacted in this province, but the results of their operation have been relatively unimportant.

(1) *Monetary Times*, 11 March 1921, p. 6.

In 1916 an Act was passed authorizing loans to settlers in the newer portions of the province, that is in the northern and northwestern section. A prospective borrower in making application for a loan must give detailed information as to the lauds, buildings, live stock and all equipment and also as to the purpose for which the loan is desired. If the loan is granted it must be devoted to the purpose specified in the application, such as clearing land, erecting buildings, purchasing machinery, etc., for the object to be secured in making these loans is to aid *bona fide* settlers in making further improvements. The maximum amount loaned to any settler is \$500 and the rate of interest is 6 %. The terms and conditions of the loan are determined by the Loan Commissioner, who is entrusted with the supervision of this business. Any loan thus made is registered against the land and constitutes a lien on it. The money for this purpose is contributed out of the consolidated revenue fund of the Provincial Treasury. Up to 31 October 1917, there had been 1,167 loans made aggregating \$300,000, and by 31 October 1920 the total amount of these loans was over \$500,000.

In 1917 another piece of legislation, known as the Farm Loan Act, was passed empowering the Provincial Treasurer to lend money to a township upon the security of the debentures of the township, for the purpose of enabling the township to make loans to farmers, chiefly for making permanent improvements, such as drainage systems. The results from this Act are insignificant.

In 1920 the Cooperative Marketing Loan Act was passed, authorizing the Lieutenant-Governor-in-Council to loan to a co-operative association engaged in cleaning, storing and marketing seed and potatoes an amount not exceeding \$3,000. The loan must not be more than 50 % of the appraised value of the property on which the loan is made. The loan is to be free of interest for two years and after that 6 % interest must be paid. The amount borrowed may be repaid by the association at any time; but at least 50 % must be repaid at the end of five years from the date of the loan and the other 50 % at the end of another quinquennial period. Each loan shall be based on a contract made by the association with the Minister of Agriculture and may be secured by a chattel mortgage or by a first mortgage on real estate. The books, accounts and property of an association receiving such aid shall be open to complete inspection and investigation by a person appointed by the Minister. The limited extent of the authority of this Act must prevent any great expansion of these loans.

Later in the year 1920, the government appointed a commission to investigate the problems of short-term and long-term credits, with a view, if deemed advisable, to bringing in a plan by which to meet the needs of the farmers along these lines. The report of this commission was presented on 15 October 1920 (1), and its recommendations may be outlined briefly.

(1) REPORT OF COMMITTEE ON RURAL CREDITS, 1920. Ontario Department of Agriculture. Toronto, 1921.

As to *short-term credits* : The commission finds that the present banking facilities are inadequate to the needs of the farmers in the following respects : first, that the practice of the commercial banks in making loans for at most three months, while useful to the commercial and industrial classes, is useless to the farmers, for the latter has but one turnover a year while the former classes turn over their capital at least six times and often more frequently during the year ; second, that the collateral security furnished by the business classes is impossible for the farmer and that if the character of the latter is not sufficient he has no bankable security which he can offer to the bank as a guarantee for the repayment of a loan. The solution offered by the commission to meet the needs of the rural classes is the formation of rural credit societies of the same general type as those in Manitoba (described above), but with the following modifications : (1) the stock of the rural credit societies should all be subscribed by farmers, thus keeping the provincial government and the municipalities from participation in it ; (2) the nine directors of each society should consist of six chosen by the farmer shareholders and three others chosen by " such organizations or associations as are best calculated to understand and to promote the welfare of the agricultural interests. " This would keep the control of the society in the hands of the farmers and yet would secure, through the presence of the other three members of the board, men of good ability, of permanent interest, and with a wider viewpoint than that of the local community. In order to secure the funds for making loans to such societies, the commission recommends the establishment of a savings institution, which would receive deposits, on which interest at the rate of 4 % per annum would be paid, and use these funds to make loans to farmers through the rural credit societies at five to five and one-half per cent.

As to *long-term credits* : the report shows that only a very small part of the mortgage loans made to farmers are now made by the companies which have been engaged in this special business. At present about 90 % or more of these loans are made by wealthy individuals (frequently active or retired farmers) who know the local conditions and are willing to invest their money in this way. But this precarious source of funds fails to meet the requirements of many parts of the province, especially in the newer and more backward sections, so that some other provision should be made. Then, too, the old-established companies engaged in the mortgage business are not satisfactory, for when they make a loan upon a mortgage they reserve the right to review their investment at the end of five years, and if the security is not what they consider adequate or the conditions of the investment market have changed they may call in their loans. Such a loan is almost useless for a farmer's purpose, not only on account of its short duration but also because of its uncertainty. Hence some new system is required under which opportunity would be furnished for placing loans for reasonable periods and at a reasonable rate of interest. The plan devised by the commission to suit these requirements involves the organization of a land mortgage bank with capital of \$500,000

subscribed by farmers. This bank would operate in conjunction with the rural credit societies. As soon as loans had been made by the bank up to, say, \$100,000, the bank would be able to mass its first mortgages thus obtained up to this amount and make them the basis of a debenture issue of the same amount, guaranteed by the government, which would be sold to the investing public to get additional loanable funds. By making the duration of the loans correspond to the period of the bonds, as loans were increased the bond issues would be increased and as loans were paid off the bonds could be called in and redeemed. In this way there would be a perfectly elastic system responsive to the needs. Loans would be made by the land mortgage bank for five to thirty years on the amortization principle, and the interest rate would be one per cent. more than that at which the bonds were issued. Provision would be made by which the borrower could pay off all or any part of the principal on any interest date after five years. This would enable him to clear off the mortgage as soon as he found it possible to do so, and would permit him to lower the interest rate in the event that he could make better terms in the future. The bank should not loan in excess of 50 % of the value of the land and 20 % to 30 % of the value of the permanent insured improvements; and in any individual case the minimum loaned should be \$500 and the maximum should be \$12,000. The maximum dividend allowed on the stock of the bank should be fixed at 7 %.

The report urges that the short-term and long-term loans should be administered by one institution. To this end the land mortgage bank should be empowered to act as a savings institution in receiving deposits and paying interest on them. These savings would be used to make the short-term advances and nothing else, while the mortgage loans would be cared for out of the capital of the bank and the sale of its debentures. There would be one board of directors for this central institution, but the work carried on under the board would have the two branches with a separate manager and accounting system for each. Regular reports, with supervision and inspection, of this institution would give the government its appropriate function of regulation of the system.

These recommendations have not been put into effect by enactment, but on the contrary, the legislation which has just now (April 1921) been passed applies an entirely different principle. Instead of keeping the whole system dissociated from the government the entire machinery is linked up closely with the government. The system for granting short-term loans is practically the same as that of Manitoba and the Act is almost a verbatim copy of the Manitoba Rural Credits Act. The provision for long-term loans is virtually a duplication of that of the Manitoba Farm Loans System, except that, first, the Manitoba Farm Loans Association is replaced by an Agricultural Development Board of three members appointed by the Lieutenant-Governor-in-Council; second, that the board will loan, under favourable conditions, up to sixty-five per cent. of the value of the land and buildings; and, third, loans shall not be made for less than three nor more than twenty years. In order to secure funds,

the provincial treasurer is authorized to open offices in the province to receive deposits of any amounts and from any persons or corporations ; to pay interest on these deposits at whatever rate he may fix not in excess of four per cent. per annum ; and also to determine the conditions of repayment of such deposits.

§ 6. QUEBEC.

In this Province there is no system for furnishing loans for distinctively agricultural purposes, but there are many co-operative credit banks (known as *Caisses Populaires*), organized under the Quebec Syndicates Act, which provide real assistance to needy farmers and others. In their inception these banks were intended to be for the assistance of the labouring classes, but their activities have been widened to include agriculture and from their funds loans are made for both short-term and long-term requirements. Each of these banks is a separate entity and operates in a restricted locality so that the management of the bank may know all those who may apply for loans. The loanable funds of a bank are obtained by receiving the deposits of the savings of the people in that section and by the sale of its shares. The value of each share is usually five dollars and is payable in small instalments of a few cents each. The system is voluntary and members may withdraw their holdings at any time. The social importance of such a system, especially in encouraging thrift, is made a paramount feature

Loans, if of small amounts, are made on the security of promissory notes, but all other loans are based on first mortgages. Loans are made only to members and the latter, in order to be admitted, must be "honest, sober and industrious." There is, therefore, a good reason why these banks have never lost a cent on their loans. They aim to serve the people, not to make large profits on their investments, and, consequently, their loans are in small amounts chiefly. The larger proportion of the loans are for sums ranging from \$5 to \$200. The repayment of these advances, both as to principal and interest, is made monthly and in this way the regular encouragement of saving is promoted. The rate of interest paid to depositors for their savings varies from three to four per cent. and the average rate of interest charged to borrowers approaches six per cent.

The law under which these banks operate requires each to set aside annually out of net profits at least 10 % of the latter as a reserve fund and efforts are made during the first years to build up this fund to a substantial amount, so as to increase the financial strength of the bank and to increase the people's confidence in it. This reserve is never to be distributed to the shareholders, not even in case of liquidation. Out of the balance of the net profits, if any, dividends may be paid to the shareholders in proportion to the amount of fully paid shares and to the time during which such shares have been paid in full during the last financial year. The dividends range usually from four to seven per cent. The primary

purpose is not to make large returns on capital but to distribute the benefits as widely as possible. The only supervision exercised by the government over these banks is in requiring each to prepare, at the close of its fiscal year, a report in triplicate of its operations: one copy to go to the provincial secretary, one to the clerk of the municipality and the third for its own files.

§ 7. NEW BRUNSWICK

The need for some means to encourage the tillage of the land and to stop the migration from the country to the towns and the consequent increase of uncultivated farms induced the government to pass in 1912 "An Act to Encourage the Settlement of Farm Lands." Under this Act the government put out a bond issue of \$100,000 to run for 20 years, and out of current revenues \$5,000 yearly are set aside to repay the principal of this debt. For the execution of the Act a board of three members is appointed, which is empowered to administer this fund, to buy farms and to resell them at cost to settlers. A catalogue is kept, with detailed information, concerning farms which are suitable for settlers, and if a settler has no choice as to the place in which he wants to locate he is helped to make his choice. When a settler has decided upon a farm that he would like to buy the inspector-member of the board examines it fully and reports to the board concerning its value, etc., and if the report be satisfactory the board buys the property and resells it to the settler upon the terms contained in the act, namely: If the price to be paid for the property is less than \$1,000 the purchaser must pay down 25 % of the price when he receives possession; if the price is over that amount he must make an initial payment of 35 %. The balance, with interest at 5 %, must be paid at such times as may be agreed upon by the board and the purchaser, but the final payment must be made within ten years of the date of the agreement to purchase, except in exceptional cases when the board by unanimous consent may extend the time by two years. In the case of those young men who want to settle near their relatives, assistance, if asked, is given under the same conditions as those just mentioned. If a settler fails to make his payments the board may take the land and place another settler upon it. This action will be immediately taken if there is evidence of negligence or intentional fraud; but where the default is due to unfortunate conditions over which the settler has no control he is given the utmost encouragement and assistance. No great benefits to the province have been secured by this legislation, probably because the ten-year term is altogether too short for the great majority of purchasers of land since their yearly payments would be correspondingly heavy.

"An Act to Provide for the Purchase of Sheep" was passed on 26 April 1918, by which the Lieutenant-Governor-in-Council is authorized, upon the recommendation of the Minister of Agriculture, to purchase for the province such a number of breeding sheep as may be in the public interest

but not to exceed in value \$ 50,000. These sheep are sold to farmers at cost, part of the price to be paid when the agreement to purchase is signed, another payment to be made when the sheep are delivered, and these two payments together shall amount to one-third of the gross purchase price. The balance is settled by giving a note, payable in one year, with interest at six per cent. per annum until paid. The sheep shall not be sold, killed or otherwise disposed of by the farmer until all claims against them are paid. The purpose of this legislation was to improve the quality of the farmers' flocks and to keep within the province those grades of animals which would yield the largest returns of wool and meat with the greatest economy of expenditure. The result of this government action was that the farmers generally took advantage of this means of securing valuable stock at the lowest cost to themselves.

§ 8. NOVA SCOTIA.

No provision has been made in this province for short-term credits, but for mortgage credit legislation was passed in 1912 (Acts of 1912, chap. 10) entitled "An Act for the Encouragement of Settlers on Farm Lands." Subsequent amendments were made in Acts of 1913, chap. 56, Acts of 1915, chap. 35, and Acts of 1919, chap. 7 (Sec. 21). While the legislation was designed primarily to aid those who are just coming into the country, who are predominantly British, to become landowners, its benefits are available also to natives who desire to buy land or to improve their holdings.

The government does not make the loans to the settlers directly, but has made arrangements with an already established company engaged in this business. The settler who wishes to borrow must have cash capital equal to 20 % of the appraised or purchase value of the land, besides what he would require for house furnishings, stock, equipment, and the family sustenance until the property is secured. When a man wants a loan under this Act, he applies to the Department of Industries and Immigration. An appraisal of the land which he owns or wishes to purchase is then made by the farm inspector of that department and another inspection and valuation is made by the land valuer of the lending company. If the conditions are reasonable the latter will lend the man 40 % of the value of the property, taking a first mortgage as security; and in approved cases and to thoroughly experienced farmers the government will guarantee, if necessary, an additional loan of 40 %, which makes the company's total loan in such cases 80 % of the value of the property. Farms on which loans are granted are inspected by the department and they must be operated efficiently according to instructions, so as to keep them and their equipment in proper condition.

The mortgages at first were for a definite period, usually running but not exceeding 15 years, but this period proved too short on account of the heavy annual payments that were necessary. In 1919, therefore, the Act was amended so as to increase the loaning period to 30 years. Repayment of the loans is on the amortization plan. As long as the instal-

ments are paid, the loaning company cannot call in the loans before the expiration of the period ; but provision is made whereby the mortgagor may pay off his indebtedness at any time within that period. In case the settler at first finds it difficult to pay anything on the principal, the government and the lending company may relieve him of any such payments for a period of not more than five years ; but he must keep up his payments of interest under all conditions. The rate of interest charged varies from six to seven per cent., according to the condition of the money market.

The foregoing plan is well considered and successful in many ways. A large number of loans have been made under the authority of this Act, many of which have been repaid promptly and others more gradually. Taking everything into consideration, the number of failures of borrowers is very small.

Part IV : Miscellaneous Questions relating to Agricultural Economy

I. — ECONOMIC AND SOCIAL CONDITIONS OF THE AGRICULTURAL CLASSES

GREAT BRITAIN AND IRELAND.

EARNINGS AND WORKING HOURS OF FARM-WORKERS IN SCOTLAND (*Continued*).

SOURCE (OFFICIAL):

WILSON (Sir James), K. C. S. I.: Report to the Board of Agriculture for Scotland on Farm-workers in Scotland in 1919-20. Edinburgh, 1921.

II. — WORKING HOURS.

Before the war in the greater part of Scotland the summer working day was recognised as one of ten hours — generally from 6 a. m. to 6 p. m. with 2 hours off at dinner time — but in some areas a shorter day had been adopted. On some farms an interval of 10 or 15 minutes was allowed in the afternoon for tea. In the Lowland part of Perthshire and on a few farms in Linlithgow and Roxburgh the working day in summer was 9 ½ hours. In the greater part of Fife it was 9 hours — from 7 a. m. to 6 p. m., with 2 hours off at mid-day — a rule which had been adopted so far back as 1893. During the winter months the general rule was from dawn to dusk, with one hour's interval at mid-day, making an average of 8 working hours — from 7.30 to 4.30 less one hour. In most farms the working-hours on Saturdays were the same as on other days, but in some parts of the country it was becoming customary to stop work earlier on Saturday at 4, 3, or 1 p. m. except at busy seasons. The Farm Servants' Union had been pressing for a Saturday half holiday, and in a few areas had been successful in securing it for part of the year. For the greater part of Scot-

land the pre-war working hours may be reckoned as having been for 35 weeks in summer 60 hours a week, and for 17 weeks in winter an average of 48 hours a week, making an average for the 52 weeks of 56 hours — to which, for the ploughman, must be added 7 hours for stable-work, making his working week 67 hours in summer and 55 in winter, an average of 63 hours for the year. These, however, were the maximum working-hours, and although endeavour is made to find indoor employment in bad weather the farm workers are often comparatively idle. This is especially the case in the Western Highlands and Islands. The general custom about holidays was that New Year's Day and one or two hiring fair days were general holidays, and at slack seasons a man could always get a few days' leave without deduction of pay. Until the passing of the Insurance Act, it was not usual to deduct pay for short periods of sickness. Where the farm-workers were engaged by the half-year, little difference was made in the rate of wage between the summer and the winter half-year, although the working hours were longer in summer than in winter, but less irksome owing to the better weather.

§ 1. AGREEMENTS BETWEEN THE FARMERS' AND FARM SERVANTS' UNIONS IN REGARD TO WORKING HOURS OF PLOUGHMEN.

The Scottish Farm Servants' Union, which is open to all classes of farm-servants and rural workers of either sex, was founded in 1912 with the following objects:—

To regulate the relation between farm-servants and rural workers and their employers; to assist members in case of dispute; to provide legal aid in cases arising out of the members' employment; to provide a fund for sickness, and generally to watch over the industrial interests of its members, and initiate and aid any efforts to improve their conditions.

At the end of the year 1919 there were 424 branches and 22,840 members — 20,910 men and 1,930 women comprising about 25 per cent. of the male and 15 per cent. of the female farm-workers of Scotland.

The National Farmers' Union of Scotland, which is open to all persons engaged in the actual practice of farming, and farming not less than two acres of land, was founded with the following objects:

To watch over and conserve the interests of Agriculture in all its branches, and to promote its interests by such means as may from time to time appear expedient; to secure Parliamentary and other support of British Agriculture; and to protect and further the interests of members of the Union individually and collectively.

The number of branches at the end of 1919 was 137.

Soon after the outbreak of war the Farm Servants' Union suspended its endeavours to reduce the working hours on farms, which had already met with some success; but continued to work for an increase in wages, especially by means of collective bargaining at hiring fairs and elsewhere.

Local conferences were arranged between representatives of the farmers and farm-workers, with the object of coming to an agreement as to the rate of wages to be adopted as the standard in making new bargains. This movement was first successful in the Glasgow area, and gradually extended to most counties in Scotland. After the armistice the Farm Servants' Union again took up the question of reducing the number of working hours on farms, and on 14 February 1919 an important Conference was held at Perth between representatives of the National Farmers' Union of Scotland and the Scottish Farm Servants' Union. The Conference agreed to make the following recommendations for the acceptance of the bodies interested :—

That it be recommended to the farmers and workmen that the working hours from Whitsunday term 1919, be based on an average of 9 hours from stable to stable and do not include stable-work or meal hours ;

That this be adjusted so as to secure an average working week of 54 hours ;

That there be 21 days' holidays, or 42 half-days in each year, as may be arranged by local conferences ;

That the working week of 54 hours should be subject to the deduction of the holidays specified ;

That, in addition, there be allowed (1) the usual New Year's Day holiday, (2) in the case of yearly engagements one hiring fair day, and in the case of half-yearly engagements two hiring fair days ;

That in arranging for holidays and half-holidays employers should have the right to require workmen to work overtime during the periods of seed-time and harvest-time on payment of overtime rates ; and

That it be remitted to the County Executive Committees of the two bodies to adjust the working hours locally on this basis.

The effect of these recommendations would be that a ploughman would bind himself to work during the whole year 2,610 hours ; an average of just over 50 hours per working week, besides stable work.

Unfortunately after the Conference a dispute arose as to whether the agreement applied only to ploughmen or extended to other farm-workers. The Central Executive Committee of the Farmers' Union insisted on limiting the Perth agreement to ploughmen and in consequence the Farm Servants' Union announced that they were not bound by the terms of the agreement, and left themselves free to take whatever action they deemed advisable to secure a weekly half-holiday and a shorter working day.

Notwithstanding the breakdown of the Perth agreement, it greatly influenced many local conferences which were held between the county branches of the two Unions. These local agreements are not legally binding on anyone, being merely recommendations made for the guidance of the members of each Union. There is no doubt that these conferences as a whole have had a very beneficial effect in reducing the number of individual disputes and preventing many changes of employment.

For a majority of the farm-workers new bargains have been made for the year or half-year commencing with Whitsunday 1920, and before

that term a number of important local conferences were held at which agreements were come to, both regarding the number of working hours and the rate of wages to be recommended for the ensuing year or half-year. It was not possible to collect detailed statistics showing how far those recommendations were generally adopted by individual farmers and farm-workers in making their new bargains, but, by putting together such information as is available, some idea of the state of things in September 1920 can be given. It will be understood that estimates thus framed can only be an approximation to the truth. Sir James Wilson, in his report, has given this information in detail, but for brevity we have thrown the data into tabular form. (See pages 458-461).

§ 2. THE WORKING HOURS OF CATTLEMEN.

The cattleman's duties being to tend and feed the cattle, his working hours depend upon their varying needs. During the summer months, when they are out at grass, his work with the cattle is comparatively light, but at such times he is generally expected to help in the other work of the farm, and especially in harvest time. At other times of the year when the cattle are under cover, his work in preparing their food and distributing it to them takes him about 9 or 10 hours a day, including Saturdays. He has to be on duty on Sundays also, but by preparing the food on Saturday evenings, he can reduce his Sunday work to from 5 to 7 hours. On some farms arrangements are made to relieve him on Sundays by having his Sunday work done by some other worker, man or woman. He can generally get a week or two of holidays on full pay, if he wishes.

§ 3. THE WORKING HOURS OF SHEPHERDS.

It is impossible to fix working hours for the shepherd. In ordinary good weather, when there is plenty of grass and his flock is healthy, he may have little to do except walk over the hills with his dogs and see that all is well with his sheep; and this he generally does on Sundays as on other days. But in busy seasons, such as lambing, dipping, and clipping-time, or when disease is rife or insects troublesome, he may have to work hard for 12 hours in the day or more; and in a drifting snowstorm, he may have to risk his life to save his sheep.

§ 4. THE WORKING HOURS OF ORRAMEN AND WOMEN.

The working hours of orramen and permanent women workers are generally the same as those of the ploughman, except that they have no stable work. When women and children are temporarily employed in potato-lifting, it is sometimes arranged that they shall work for an hour

TABLE XV. Working Hours of Ploughmen in each County of Scotland according to Local Agreements in Force in September 1920

County	Employed at	Number of hours per working day		Number of weeks and working hours per week in each period						Times of starting and finishing work						Dinner break (Hours)	Tea break (Hours)	
		Winter	Summer	Seed time and harvest	Winter		Summer		Harvest	Winter	Summer		Harvest					
					Weeks	Hours	Weeks	Hours			Start	Finish		Start	Finish			Start	Finish
Wigtown . . .	Whitsunday																	
Kirkcudbright and Dumfries . . .	—																	
Roxburgh . . .	Whitsunday																	
Berwick . . .	Whitsunday		9														5	
Peebles	—		9														6	
Haddington (1) . . .	28 May		—	9	0	4											6	
Midlothian and Linlithgow	28 May																5	
Lower Clyde Valley (Mid and Lower Lanarkshire, E. Renfrew, S. Dumbarton shire)(1)	—																6	
Lower Clyde Valley (outlying parts)	—																5	
Lanark	—																6	
Ayr	—																—	
Argyll	—																49½/2	
Argyll Kintyre	—																60	
Bute and Arran	—																6	
																	5	30

49 1/2
60

Fife	Martimas	8	9	—	—	44	—	50	—	54	0	5	—	—	1-1 1/2
Kinross	Martimas	8	9	—	—	44	—	50	—	54	8	5	—	—	1-1 1/2
Perth	Martimas	8	9	10	—	—	—	—	—	—	8	5	7	5-30	1-1 1/2
Forfar	Martimas	8 1/2	9	10	—	—	—	50	—	—	7	5	6-30	5-30	(2) 2 (3) 1 1/2
Kincardine	28 May	—	—	—	6	45	36	50	8	60	—	—	—	—	—
Aberdeen	28 May	8	9	10	—	—	—	—	—	—	8	5	—	—	2
Banff	Whitsunday	9	9	10	—	—	—	—	—	—	6-30	5-30	6-30	5-30	2
Monay (1)	Whitsunday	8 1/2	10	10	—	—	—	—	—	—	7-30	4-30	6	6	2
Nairn (1)	Whitsunday	8 1/2	10	10	—	—	—	—	—	—	7-30	4-30	6	6	2
Inverness (2)	28 May	8 1/4	9	10	8	49 1/2	38	54	6	60	—	—	—	—	1 1/2
Inverness (7) (1)	—	8	—	—	13	44	29	50	6	60	7-30	5	6-30	5-30	(2) 2 (3) 1 1/2
Ross and Cromarty	Whitsunday	8	9	10	12	44 1/2	32	50 1/2	8	60	8	5	6-30	5-30	6 (2) 2 (3) 1 1/2
Sutherland (5)	Whitsunday	—	—	—	—	—	—	—	—	—	—	—	—	—	(2) 2 (3) 1 1/2
Caithness	28 May	7 1/2	9	10	—	—	—	—	—	—	—	—	—	—	—
Orkney	—	8-6	9-10	—	—	—	—	—	—	—	—	—	—	—	2
Shetland	—	6 1/2	10	—	—	39	—	60	—	—	8	4	6	6	—

(1) Seedtime is given 4 weeks at 9 hours a day, Saturdays included, making 54 working hours per week. The tea break is only allowed during the 6 weeks of harvest, but at other times it is allowed in the forenoon. — (2) Dinner break in summer, seed and harvest time — during the 6 weeks of harvest, but at other times it is allowed in the forenoon. — (3) Dinner break in winter. — (4) In the Lower Clyde Valley the ploughman's hours per week, including carting and stable work, average: — Winter, 51 1/2; summer, 58; harvest, 67. — (5) These data are the same as drawn up in the Perth agreement. — (6) These data were agreed to by the County Committees of the National Farmers' Union and the Farm Servants' Union in March 1910. — (7) These data are according to a printed contract recommended by the County Branch of the National Farmers' Union on Whitsunday 1920

TABLE XVI. — *Holidays and Half-holidays in each County of Scotland, according to Local Agreements in force in September 1920.*

County	Number of half-holidays allowed per year (usually Saturdays)	Other holidays
Wigtown	52	New Year's Day and days in lieu of full working Saturdays.
Kirkcudbright and Dumfries . .	42	
Roxburgh	—	New Year's Day, hiring fairs and show days. Usual Saturdays or 14 clear days per year.
Berwick	34	New Year's Day. 1 hiring fair day.
Peebles	—	No agreement.
Haddington	42	
Midlothian and Linlithgow . .	46	
Lower Clyde Valley (Mid and Lower Lanarkshire, E. Renfrew, S. Dumbartonshire). . .	42	
Lower Clyde Valley (Outlying parts).	—	New Year's Day, hiring fairs. Leave when asked for.
Lanark	—	No agreement.
Ayr	—	New Year's Day, 2 hiring fair days. Leave when asked for.
Argyll	—	Holidays when asked for.
Argyll (Kintyre).	42	Holidays in lieu of full working Saturdays and 10 clear days per year.
Bute and Arran	—	New Year's Day, 2 fast days, 1 hiring fair day and 14-16 clear days per year. Sometimes 1 week's holiday at end of each term.
Fife	42	New Year's Day, 1 hiring fair day.
Kinross	42	New Year's Day, 1 hiring fair day.
Perth	42	
Forfar	—	Usual holidays, and leave given in lieu of full working Saturdays.
Kincardine	—	Men are allowed one day to fit; if they take more, it is deducted from their leave.

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County	Number of half-holidays allowed per year (usually Saturdays)	Other holidays
Aberdeen .		12 clear days per year
Morny	On some	On some farms, 1 half holiday per month.
Nairn.	On some farms 52	On some farms, 1 half holiday per month.
Inverness (1)		11 Days of 9 hours holiday per year.
Inverness (2)	12	New Year's Day; married men, 1 feeding market; single men 2 feeding markets.
Ross and Cromarty	12	New Year's Day, Thanksgiving Day, 2 fast days.
Sutherland (3).	12	New Year's Day; for yearly engagements, 1 hiring fair; for half-yearly engage- ments, 2 hiring fair days.
Caithness	32	New Year's Day, 1 hiring fair day.

(1) Agreed to by the County Committee of the National Farmers' Union and the Farm Servants' Union in March 1919. — (2) According to a printed contract recommended by the County Branch of the National Farmers' Union on Whitsunday 1920. — (3) These data are the same as drawn up in the Perth agreement.

or two less than the ploughman. Dairymaids and byre-women have long hours, especially where milk has to be supplied fresh in the morning to neighbouring towns. In such cases the dairymaids have to be up by four o'clock and do not finish work till late in the evening, though they generally have a few hours rest during the day. Their work on Saturday is the same as on other days, but it is sometimes arranged to let them have every second Sunday off. Full information on this subject will be found in the Report of the Committee on Women in Agriculture in Scotland recently submitted to the Board.

* * *

From the above tables and account of the present working hours in the different counties it will be seen that in a great part of the country the joint recommendations made by the Perth National Conference have been practically followed on many farms, especially in regard to the adoption of the nine-hour day in summer and the Saturday half-holiday, except in busy seasons. There are, however, numerous exceptions. The

Saturday half-holiday on some farms begins at 11.30 a. m. and on others as late as 3 or 4 p. m., and also on many farms the ploughman is still expected to work ten hours a day in summer when the weather is suitable, especially in the Highlands, where wet weather often prevents out-door work, and it is essential to take full advantage of fine days when they come. Almost everywhere work is still done for ten hours a day (including Saturdays) during harvest, and in many cases during seed, hay and potato-lifting time. On the other hand, the working hours in winter are almost everywhere from dawn to dusk, and average about 8 hours a day (except Saturdays) for the three or four winter months. There are many variations, but on the whole the ploughman's working-week now averages for the year about 50 hours, besides about 7 hours stable-work — a reduction on the average of about 5 hours a week compared with the pre-war working hours.

Considerable progress has also been made in defining by agreement certain matters regarding which custom was vague, such as stable-work, the method of reckoning working hours, overtime and payment during sickness. In some counties forms of engagement, to be signed by the worker and his employer, have been printed, embodying the terms recommended. All this must have a valuable effect in making the conditions of the contract more definite and in obviating disputes.

II. — LAND SYSTEMS

GREECE.

THE AGRARIAN REFORM.

OFFICIAL SOURCES :

ANNUAL STATISTICS OF AGRICULTURAL PRODUCTION. Kingdom of Greece. Ministry of National Economy. Statistics Department. Year 1916. Athens, 1920.

GREECE : AGRARIAN LAW OF 27 FEBRUARY (11 MARCH) 1920 "*Journal of the Government of the Kingdom of Greece*, 28 February (12 March) 1920.

OTHER SOURCES :

GREECE WITH THE CYCLADES AND NORTHERN SPORADES. Handbooks prepared under the direction of the Historical Section of the Foreign Office, No. 18. London, H. M. Stationery Office, 1920.

PANAJOTIS (A. Decasos), Ph. D. : *Die Landwirtschaft im heutigen Griechenland*. Berlin, P. Parey, 1904.

GRIECHENLAND. WIRTSCHAFTLICHE VERHÄLTNISSE. Nach den Berichten der K. u. K. öster.-ungar. Konsularämter. Vienna, K. K. öster. Handelsmuseum, 1913.

- TSOUDEROS (E. J.) : Le relèvement économique de la Grèce. Paris-Nancy, Berger-Levrault, 1920.
- VOGASLI (Dr. D. K.) : La solution de la question agraire en Grèce. Athens, J. Sideris, 1919.
- RUFFOLO (Dr. Ugo) : La Grecia economica odierna. Istituto coloniale italiano. Ufficio di informazioni economiche estere. Rome, 1920.
- MYLONAS (M.) : Le mouvement coopératif en Grèce. *Annales de la mutualité et de la coopération*, 13th Year, No. 3-4, March-April 1911.

§ I SOME NOTES ON THE RURAL ECONOMY OF GREECE.

(a) *Territory and Population.*

As a result of the peace and the Treaty of Bucharest of 1913, the territory of Greece was doubled in extent, its area being increased from 64,296 square kilometres to 120,000 square kilometres. The territories occupied according to this treaty were: Northern Macedonia, Epirus, Crete, and the islands of the Egean Sea. Greece had another considerable territorial increase in consequence of the world-war: the conference of San Remo assigned to her Bulgarian and Turkish Thrace as far as the line of Tchataldja, the Egean islands which still belonged to Turkey and the territory of Smyrna, that is the vilayet of Aidin, this last however not in full sovereignty.

The new European territories measure about 28,500 square kilometres; Smyrna and the territory within its administrative limits, 53,735 square kilometres. Greece, therefore, at the present time, taken as a whole, and taking into account the resolutions of the Conference of San Remo with regard to Turkey, has an area of about 202,500 square kilometres.

The population of Greece may be calculated as follows:

<i>Old Greece</i> (territory of the kingdom exclusive of the acquisitions made in 1913 and 1920)	2,765,000 inhabitants
<i>New Greece</i> (territory assigned to Greece by the treaty of Bucharest)	2,010,000 "
Total . . .	4,785,000 inhabitants

the density of population being 40 per square kilometre.

The population of the new European territories assigned to Greece in 1920 may be calculated at between 800,000 and 900,000; for the vilayet of Smyrna the estimates vary from 630,000 to 1,500,000 inhabitants.

Among this population the agricultural class is undoubtedly the most numerous; according to the official figures referring only to Old Greece, the agricultural population is 61.7 per cent, and M. Tsouderos, founding his calculation on the consideration that the new provinces are chiefly inhabited by agriculturists makes it (page 111 of his book) for the whole of Greece, exclusive of the lately acquired territories, 65 per cent.

(b) *Agricultural production.*

The principal crops in Greece are the olive, the vine, cereals, tobacco and cotton.

In the following table we give figures referring to the area cultivated, the production and its value, according to classes of produce, in 1918, the last year for which we have official figures from the Statistics Department of the Ministry of National Economy of Greece. These figures do not include the production of the territories occupied according to the conference of San Remo.

Area Cultivated, Production and Value of Produce in 1918.

Class of produce	Stremmas (1) cultivated	Production in quintals	Value of produce in drachmas (2)
Cereals	9,425,745	8,305,102	662,826,767
Dried peas, lentils etc.	713,151	487,293	54,005,974
Vegetables	341,356	1,644,867	84,847,900
Industrial plants (tobacco, cotton, sesame, anise, flax)	615,756	382,213	178,539,136
Forage plants	286,163	913,554	25,003,152
Must	1,644,525	3,173,856	153,142,508
Table grapes	114,700	227,073	11,100,819
Raisins	1,014,964	1,241,673	80,505,355
Olive oil	—	956,674	255,633,383
Table olives	—	175,902	14,025,087
Total . .	14,156,360	—	1,519,930,681

(1) 1 stremma = $\frac{1}{100}$ of a hectare — (2) 1 diachma = 1 franc (at par).

The fruit produced in 1917 amounted to 1,685,066 quintals, of the value of 60,544,989 drachmas.

The total value of the agricultural produce in Greece previous to 1919 might be calculated at about 1,900,000,000 drachmas, reckoning at 250 millions the value of animals and animal products, and at 76 millions the forest produce.

With regard to the new territories annexed to the kingdom in 1920, it should be observed that in the vilayet of Adrianople the area under cultivation is about 830,000 hectares, of which 347,000 are devoted to cereals. In 1920 the value of the cereals produced was 64 millions of drachmas, and in the same year the quantity of tobacco produced was 6 millions of

kilogrammes, and the value of the tobacco exported was 16 millions of drachmas: in 1911 the value of tobacco exported was 28 millions of drachmas.

To vine-growing 40,000 hectares are devoted, and 375,000 hectares are covered with woods. The breeding of cattle and sheep forms one of the chief sources of wealth. The same may be said of the silk culture, which produces about 1,760,000 kilogrammes of dry cocoons.

In the territory of Smyrna (vilayet of Aidin), the area cultivated is divided as follows: about 600,000 hectares are sown annually, of which from 350,000 to 400,000 are devoted to cereals and other winter crops and from 200,000 to 250,000 to summer crops; there are 75,000 hectares of vineyards, and 60,000 hectares of olive groves, while fig-trees are grown on 10,000 hectares.

The average yearly production of the principal crops is the following in millions of kilogrammes:

Figs, 15 to 22; tobacco, 5 to 12; cereals, 400; cotton 22; dried peas, etc., 40. Of opium 500,000 to 1 million kilogrammes are produced of an average value of 12 $\frac{1}{2}$ millions of drachmas. Of wine 38,000 hectolitres are produced, and 487,000 of alcohol. Eggs are an important item of export, from 18,000 to 20,000 boxes, each containing 1,500 eggs, valued at from 6 to 8 millions of drachmas, are annually exported. The forests produce 72,000 cubic metres of wood and 36,000 quintals of bark.

(c) *The Organisation of the Agricultural Administration.*

The Greek government is working directly to meet the needs of agriculture and to encourage its progress. Its efforts with regard to reafforestation, land improvement, and the suppression of malaria are especially worthy of notice.

A regular system of administrative agricultural services, which until 1909 were almost entirely wanting, has been organized. In that year the Ministry of National Economy was created and in 1917 the Ministry of Agriculture was established. This includes, besides all its other departments, two laboratories of agricultural chemistry and three special laboratories for the diseases of plants, silk culture and the manufacture of aromatic oils. It also employs a considerable number of specialists, each attached to a particular branch of agriculture or stock breeding. The staff also include managers of experiment stations, gardens and nurseries, agricultural engineers, assistant engineers and directors, all of whom have eminently practical duties.

When it is considered desirable and the need is felt, the Government has recourse to foreign countries for technical assistance. Thus the State has availed itself of Italian experts in regard to olive cultivation and of French specialists for the improvement of fruit growing and market gardening.

The Greek agriculturist may derive benefit from this modern form of State assistance, and in fact he makes use of it in order to apply up to date

methods, especially in arboriculture, to obtain plants and seeds on advantageous terms and to combat plant diseases, etc.

Theoretical instruction has increased remarkably. Until a few years ago there was only the Averoff Higher School of Agriculture and the Kassavetti Practical School. A law of 1917 enjoined the establishment of a practical school in every province, and several of these schools are already working. Another law made provision for the practical and systematic instruction of agricultural engineers.

The introduction of practical agricultural instruction into the primary schools must also be referred to, as from this measure many advantages are to be expected, since the school gardens previously instituted have answered their purpose extremely well.

A still greater impulse has been given by more recent laws, particularly on the subject of agricultural mechanics. The State has the right to obtain a loan from the National Bank for the purchase of improved appliances, insecticides, seeds, fertilizers, etc., which the Society of Agriculture undertakes to distribute among the agriculturists.

The work of the Government is effectively supplemented by the Royal Society of Agriculture which receives an annual grant varying according to the requirements of agriculture. Besides the many other ways in which it helps to diffuse greater knowledge, it has established an experiment station, where it is proposed to acclimatize various species of cereals and foreign leguminous and industrial plants not known in Greece, two great nursery gardens from which fruit trees are distributed at moderate prices, a school of agriculture and a school of silkworm culture in the neighbourhood of Athens.

(d) *Agricultural Credit and Co-operation.*

1. *Agricultural Credit.* — By the agreement of 6 December 1914, ratified by Law No. 656 of 1915 the National Bank of Greece is obliged to place at the disposal of the State 25 millions of drachmas at 4 per cent. in order to enable it to organize agricultural credit. Under Law No. 603 of 1914 two State Agricultural Banks were organized, the Agricultural Bank of the Egean Islands, and that of Macedonia, both modelled on the General Utility Bank of Crete, which is a small agricultural bank, existing there since the time of the Turkish domination and re-organised by Law No. 393 of 27 July 1901 of the autonomous State of Crete; this organization was preserved with some slight modification by the Greek Law No. 487 of 1914. The object of this bank is the encouragement and advancement of agriculture, of agricultural industries and of stock breeding in the island of Crete. The object is attained by granting to peasants mortgage loans on favourable terms, repayable in periods of from 5 to 15 years according to the amount. The value of the mortgage must be three times the amount of the sum lent, which must never exceed 1,000 drachmas for a loan to private individuals, and 4,000 drachmas to agricultural associations. The Bank has made considerable progress and has rendered excellent services.

2. *Agricultural Co-operation.* — The co-operative movement in Greece is of very recent date. In fact before the year 1914 there were not a dozen co-operative societies existing in Greece, unless we take into account some few early co-operative transactions among certain communes and some primitive associations among pastoral people relating to their pastures and the production and sale in common of the produce of their flocks.

In 1914 a fundamental law on co-operative societies was passed whereby the legal basis of such societies was laid down, whether they were agricultural, or among workmen in cities or for credit and saving, or for purchase, sale, distribution, production, mutual insurance, etc. At the same time the Ministry of National Economy, by means of a department created for the purpose, undertook a systematic propaganda in favour of co-operation. This effort at stimulation produced excellent results. By the end of 1918 there were, in fact, 917 co-operative associations of which 820 were agricultural co-operative societies registered at the Ministry of Agriculture.

These 820 co-operative agricultural societies contained 32,648 members and had a share capital of 2,515,540 drachmas.

About 100 of these societies have unlimited liability, nearly all being in the department of Messenia. The limited liability of the other societies usually varies from twice to five times the value of the share, but in some it reaches ten times, and even 50 times. The total amount of the sums represented by this limited liability is 15,972,845 drachmas.

These societies do not generally extend their work beyond the limits of the commune in which they have their headquarters.

Of the agricultural co-operative societies about three-fourths are mixed associations for credit, saving, purchase, and sale; they also, to a certain extent, perform the functions of co-operative distributive societies, procuring for the farmers not only machines, implements, fertilizers, and other agricultural requisites, but also articles for domestic use or consumption.

These mixed societies render useful service to farmers in small localities. The necessity for establishing distinct co-operative societies for the various branches only occurs in large villages, where business is more complicated, and where it is possible to find a larger number of competent managers. In these cases it is provided by the rules that the mixed associations shall contribute to the formation of special societies as soon as circumstances permit.

Among other agricultural societies must be mentioned special co-operative societies for purchase, sale and production (co-operative societies for the making or sale of wine, co-operative dairies and co-operative oil mills); the societies for the sale of currants, which are tending to federation in a great central union, are specially noteworthy. Among the recently formed societies, nine are for the purchase of land in Thessaly, where since 1907 (Law of 7 April 1907) the Agricultural Bank of Thessaly has been engaged in the purchase, distribution and colonization of State lands.

A certain number of co-operative societies have combined to form four regional unions. Others are in process of formation, and also a national

federation which will strengthen the movement. At Athens a co-operative propagandist newspaper is published. At present the National Bank obtains credit for co-operative societies; the three State Agricultural Banks above mentioned, that of the Egean Islands, that of Macedonia and that of Crete, also contribute.

A very useful provision is that whereby sulphate of copper and sulphur, imported in large quantities at reduced prices, under the guarantee of the State, are supplied on credit to co-operative vine-growers' societies.

Lastly it is anticipated that a central credit institution for co-operation will be formed.

At present three are in Greece no mutual agricultural insurance societies.

§ 2. THE LAND SYSTEM AND THE NEW AGRARIAN LAWS.

(a) *The Land System.*

(a) *In Old Greece.* — Until 1880, that is until the annexation of Thessaly, it may be said that Greece had no experience of the serious agricultural crises which disturbed the rest of Europe. The Greek general assemblies, from 1836 onwards, had passed a series of laws by which any citizen who did not possess land could easily purchase a large tract from the public and private domains of the State, by annual payments of $3\frac{1}{2}$ to 7 drachmas per stremma for a period of 18 to 30 years. Some classes of citizens were even dispensed from the payment of these sums.

By this system many homeless citizens and landless agriculturists became small proprietors; in fact, according to the statistics published by the Ministry of Agriculture in Athens, the grants of land from the State, obtained through the above mentioned law, numbered 375,000, and the lands thus granted measured more than three millions of stremmas. These figures refer only to Old Greece, and therefore do not include Thessaly nor the provinces occupied after 1913 (New Greece). Any inconvenience that may have been felt by the small agriculturists, in consequence of the increased necessities of their families and of the insufficiency of land, soon found a prompt and natural remedy in the inclination of the poorer rural population to the sea-faring trades which had for them a great attraction.

Thus after the lapse of a few years, we find in Old Greece the non-urban population differentiated into two great classes, the one comprising the small proprietors and those holding land by emphyteusis, almost all well off and independent, especially in the Peloponnesus; the other, the sea-faring class, which contributed so much to the prosperity of the mercantile marine of Greece.

(b) *In Thessaly.* — A crisis giving rise to the agrarian question manifested itself in 1880 and the following years with the annexation of Thessaly, where a totally different land system prevailed; viz. the large estates of

the *tchiflicks* in violent contrast with the pauperism of the cultivators; immense tracts of 20, 30, and even 50,000 stremnas with sumptuous *konaks* and miserable huts in which the peasant families, oppressed by the *Beys* and by tithes, lived in hardship.

With the annexation, the *corvées* and the tithes disappeared, but the question of the emancipation of the land remained a burning question, all the more because of the contrast between the land system in Thessaly and that of the rest of the kingdom, and difficult to solve because the compensation to be paid to the proprietors amounted to tens of millions. Nevertheless the miserable condition of the agricultural proletariat in Thessaly could not be neglected, and between 1907 and 1918 the State, acting through the Agricultural Bank of Thessaly, founded in 1907, succeeded in purchasing 57 estates, 635,782 stremnas in extent, and distributing them to the peasants; in this way the number of the *tchiflick* villages is reduced to about 250. In the period from 1880 to 1911 the focus of the agrarian question in Greece was Thessaly, so that the "Thessalian question" was synonymous with the "agrarian question."

But the phase which was actually decisive of the agrarian question in Thessaly did not begin until 1911, when the National Assembly, convoked for the revision of the constitution, gave to the State by Art. 17 the right of expropriating the *tchiflicks* of Thessaly for reasons of public utility, to distribute them among the poor cultivators with the object of making them small proprietors.

(c) *In Macedonia.* — In Macedonia, occupied in 1913 in pursuance of the treaty of Bucharest, the Turkish system of land holding prevailed. According to Turkish law, rural property did not belong absolutely to the holders, but formed the private domain of the State which by special acts granted it to private individuals, who thus obtained certain rights over it. In Turkish this right is called *tessaron*; it represents the right of possession and usufruct rather than the right of ownership.

The private individual to whom the State made this concession could not build on the land without special permission from the State, nor yet plant vines or trees or utilize the clay to make earthenware; he could not transfer the property to others, who if they wished to take his place were obliged to have a new act drawn up by a special office of public lands. Any testamentary disposition was also prohibited; only sons, husbands and brothers could inherit the rights over these lands, and only on condition that a new public act should recognize the succession.

There was another restriction of an economic character; if the usufructuary should neglect the cultivation of the land for three years he was dispossessed of his rights, and the State could dispose of the property.

This system recalls that of collective ownership or nationalization of the land, but in Turkey, because of the administrative methods and the temperament of the inhabitants it could only be very injurious to agriculture and to progress.

The Porte granted large tracts of these lands to powerful individuals, generally living at a great distance from them, knowing nothing about them

and entrusting their cultivation to produce-sharing tenants, who were exposed to every kind of extortion both from their employers and from the government-tax collectors. The condition of the Macedonian peasants was therefore very wretched; heavy taxes, tithes, oppression of every kind, *corvées* which must be carried out, everything contributed to reduce them to the condition of slaves.

There was therefore no interest in thoroughly cultivating the land, and no will to do it, since he who enjoyed the usufruct sought for quick returns and small expense, while the peasant had no interest in increasing the produce, which must nearly all belong to his master.

(b) *The New Agrarian Laws of 1917 and 1920.*

Being confronted with this situation, exceptional from a legal point of view, and unfavourable to agriculture, the Greek government of Salonika, presided over by Venizelos, found itself compelled to take decisive measures.

The Law of 22 December 1917 was linked through a series of other provisions to Art. 17 of the New Constitution of 1911 — already referred to — and with the object of solving the land problem of the new provinces, a number of provisions of general import were issued, which mark an entirely new departure in the agrarian policy of the State.

The new Agrarian Law, No. 1,072, of 22 December 1917, consists of five clauses, corresponding to the five edicts of the provisional government of Salonika (Nos. 2466-2470 of 20 May 1917). The most important are those respecting "the concession of land to poor cultivators to form small proprietors" and that concerning the "compulsory expropriation of rural landed property." The cultivators who have a right to "agricultural restitution," that is, to receive from the State "a sufficient lot" of land to cultivate, are classified in nine categories which are successively called to receive the concession according to the extent of the land at the disposal of the State. This land, speaking generally, consists of two-thirds of each *tchiflick*, but it may include the whole of the estate, except in every case 1000 stremmas (100 hectares), or the tenth part of the whole area (according to the different regions) which are reserved to the proprietor.

Those who have a right to the grant of a lot of land are obliged by law to form an association called "agricultural association for the purchase of land," that is, a special form of community possessed of real and personal rights, of which a large number had already arisen in a short time in Thessaly.

Many formalities are needful before the State can exercise the right of expropriation, and transfer to the Agricultural Association the expropriated land. The principal acts of the procedure are the following. At the request of the Ministry of Agriculture a royal decree determines what property is subject to expropriation in order to create small proprietors. The decree is preceded by instructions which decide questions relating

to the fertility of the soil, the number of stremnas necessary for the maintenance of a family of agriculturists, the area to be expropriated, the fixing of the compensation, etc. The Council of Public Lands, the Council of Agriculture, and in the last resort, the Council of Ministers, pronounce upon all controversies and disputes between the parties. The first of these Councils, with the addition of three high officials of the Finance Ministry, of the Ministry of National Economy and of the Ministry of Communications, decide upon the question of public utility, and fix the amount of the compensation. A second royal decree orders the expropriation. If the persons interested do not accept the sum fixed by the Administration the question is referred to the President of the Court of First Instance in the province in which the land is situated. The President summarily and provisionally pronounces or refuses the expropriation and fixes the sum due to the expropriated proprietor. In the case of refusal or dispute, or if the land is burdened with mortgages, the amount of the compensation in ready money or in "expropriation bonds" is deposited in the Central Bank and the receipt therefor is handed to the President of the Tribunal. Eight days after public notice has been given of this step, the State acquires the full ownership of the land. Then the property, without other formalities, is transferred to the Agricultural Association which administers it in the common interest of the members, and may divide it if the majority consents. The land thus acquired is inalienable, and cannot be mortgaged. It forms the "homestead" which the heirs cannot further divide. The payment of the price to the State is made by instalments in a period varying from 1 to 30 years (Art. 3 of Law No. 1072 D, and Laws Nos. 3951/911 and 103/915).

Besides the actual agriculturists, any person carrying on a useful trade within the limits of the *tchiflik* has a right to ask for an agricultural house with a garden of from 1 to 20 stremnas.

The objects of the Law of 1917 are therefore the transformation of poor farmers, and especially produce-sharing tenants, into small independent proprietors, the exemption of both large and small estates from all burdens, the protection, strengthening and organization of the agricultural class.

The law is not free from imperfections; the legislature itself, when extending it to the province of Trikkala, modified and completed nine of the sections. Its chief defect is a superabundance of rules with regard to procedure and formalities, while the officials charged with its carrying out are few in number, badly organized and not decentralized.

Other small modifications of detail were made to the Law of 22 December 1917 by the Agrarian Law of 27 February (11 March) 1920, which reproduces in its broad lines and in all its principal provisions the preceding Law of 1917.

The publication of the Law of 27 February (11 March) 1920 was hastened by the fact that the Law of 1917 contained errors of detail and some insufficient measures, but the provisions made at that time remain unaltered in the new text.

The new agrarian laws try to eliminate any damage that might be caused to the rural economy of the country, through the disappearance of the great estates, and their division into small holdings, by favouring the formation of co-operative organizations which alone are in a position to take the same action and initiative as a large proprietor. For this reason the land is not directly distributed amongst individuals; those who wish to share in the purchase of an estate, must, as has been said, form themselves into an association, and with this, not with individuals, the State will treat. This provision of the law is of great importance because it stimulates, directly and effectively, the formation of co-operative organizations and agricultural associations.

The object at which the legislature aims is only the elimination of great estates which are neglected or badly cultivated, and though no pledge has been given, nor does the law distinguish between estates which are let, and those which are cultivated directly by the proprietor, or between estates well cultivated or neglected, it is certain that it will not be applied to those great rural estates which, through the labours and personal efforts of their owners, have become model farms, an example and stimulus to a whole district. While respecting as far as the law permits the existing situation as long as it serves the general interest and the needs of the country, the Greek government possesses through this law every means it requires to modify thoroughly the system on which hitherto Greek agriculture has been based.

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THE INTERNATIONAL INSTITUTE OF AGRICULTURE

ORIGIN OF THE INSTITUTE AND SUMMARY OF THE INTERNATIONAL TREATY.

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It is a Government institution in which each country is represented by delegates. The Institute is composed of a General Assembly and a Permanent Committee.

The Institute, always confining its attention to the international aspect of the various questions concerned, shall :

(a) collect, study and publish as promptly as possible, statistical, technical, or economic information concerning farming, vegetable and animal products, trade in agricultural produce, and the prices prevailing in the various markets ;

(b) communicate the above information as soon as possible to those interested ;

(c) indicate the wages paid for farm work ;

(d) record new diseases of plants which may appear in any part of the world, showing the regions infected, the progress of the diseases, and if possible, any effective remedies ;

(e) study questions concerning agricultural co-operation, insurance and credit from every point of view ; collect and publish information which might prove of value in the various countries for the organization of agricultural co-operation, insurance and credit ;

(f) submit for the approval of the various governments, if necessary, measures for the protection of the common interests of farmers and for the improvement of their condition, utilizing for this purpose all available sources of information, such as resolutions passed by international or other agricultural congresses and societies, or by scientific and learned bodies, etc.

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PRINCIPAL WEIGHTS, MEASURES AND MONEY OF THE VARIOUS COUNTRIES AND THEIR BRITISH EQUIVALENTS

1 Cadastral arpent (Hungary)	=	1.42201	acres
1 Centimetre	=	0.393715	inches
1 Cho (60 ken) (Japan)	=	119.30327	yards
1 Crown (100 heller) (Austria-Hungary)	=	10 d.	at par
1 Crown (100 öre) (Denmark, Norway, Sweden)	=	15.1 $\frac{1}{8}$ d.	at par
1 Deciatine (2 tchetwert, (Russia)	=	2.69966	acres
1 Dinar, gold (100 para) (Serbia)	=	933/ $\frac{1}{4}$ d.	at par
1 Dollar, gold (\$) (100 cents) (United States)	=	48.5/ $\frac{1}{10}$ d.	at par
1 Drachm, gold (100 lepta) (Greece)	=	933/ $\frac{1}{4}$ d.	at par
1 Egyptian Kantar	=	99.0498	lbs.
1 Feddan Masri (24 Kirat Kamel) (Egypt)	=	1.03805	acres
1 Florin, gold, or Gulden (100 cents) (Netherlands)	=	18.753/ $\frac{1}{4}$ d.	at par
1 Franc (100 centimes) (France)	=	933/ $\frac{1}{11}$ d.	at par
1 Gramme	=	0.03527	oz.
1 Hectare	=	2.47109	acres
1 Kilogramme	=	2.2	lbs.
1 Kilometre	=	1093.613	yards
1 Kokou (10 To) (Japan)	=	1.58726	quarts
1 Lei, gold (100 bani) (Rumania)	=	9 $\frac{83}{100}$ d.	at par
1 Leu (100 stotinki) (Bulgaria)	=	933/ $\frac{1}{4}$ d.	at par
1 Lira (100 centesimi) (Italy)	=	933/ $\frac{1}{4}$ d.	at par
1 Litre	=	0.21998	gallons
	=	0.0275	bushels
1 Mark (100 Pfennige) (Germany)	=	11 $\frac{3}{4}$ d.	at par
1 Mark (100 penni) (Finland)	=	933/ $\frac{1}{4}$ d.	at par
1 Metre	=	3.28084	feet
1 Milreis, gold (Brazil)	=	28.261/ $\frac{1}{4}$ d.	at par
1 Milreis, gold (Portugal)	=	48.511/ $\frac{1}{4}$ d.	at par
1 Peseta, gold (100 céntimos) (Spain)	=	933/ $\frac{1}{4}$ d.	at par
1 Peso, gold (100 centavos) (Argentinian)	=	38.1137/ $\frac{1}{4}$ d.	at par
1 Pound, Turkish, gold (100 piastre) (Ottoman Empire)	=	188.015/ $\frac{1}{4}$ d.	at par
1 Pund (Sweden)	=	0.93712	lbs.
1 Quintal	=	1.96843	cwtls.
1 Rouble, gold (100 kopeks) (Russia)	=	28.1 $\frac{3}{4}$ d.	at par
1 Rupee (16 annas) (British India)	=	$\frac{1}{10}$	of £1 (gold)
1 Talari (20 piastre) (Egypt)	=	48.111/ $\frac{1}{3}$ d.	at par
1 Verst (Russia)	=	1166.64479	yards
1 Yen, gold (2 fun or 100 sen) (Japan)	=	28.037/ $\frac{1}{4}$ d.	at par
1 Zentner (Germany)	=	110.23171	lbs.

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Part I: Co-operation and Association

CZECHOSLOVAKIA

THE CO-OPERATIVE MOVEMENT (*continued*).

By L. P. DVOŘÁK

Doctor of Laws, Manager of the Central Union of Agricultural Co-operative Societies, Prague.

§ 4. PRESENT POSITION OF THE CO-OPERATIVE SOCIETIES.

1. *Total Number of Co-operative Societies.* — According to the list of co-operative societies inscribed in the register of the commercial courts, there were in Bohemia, Moravia and Silesia on 1 January 1918, 8,185 co-operative societies of all kinds, of which 5,123 were based on unlimited liability and 3,062 on limited liability. They were thus divided: 1,331 co-operative societies of the Schultze-Delitsch type; 911 co-operative distributive societies; 699 industrial co-operative societies; 354 co-operative building societies. There were 4,876 agricultural co-operative societies — or about 60 per cent. of the total number of co-operative societies — amongst these being 3,803 *Kampličky* credit societies. Of the 20 co-operative federations, 9 were federations of agricultural co-operative societies.

Of all the countries which made up the former Austria it is the Czech countries in which agricultural co-operation is most highly developed. Whilst in Bohemia, Moravia and Silesia the number of inhabitants was 10,069,257 in 1910 — which represented 36.1 per cent. of the total population of Austria — there were 6,978 co-operative societies, that is 42.6 per cent. of the total number of co-operative societies in Austria. If we take account only of the agricultural classes and of agricultural co-operative societies, we obtain for the year 1910 the following results. In

the Czech countries the agricultural classes numbered 3,802,833 persons, or 25.2 per cent of the total agricultural population of Austria. There were, however, in those countries 3,382 *Kampeličky* credit societies or 44.4 per cent of the total number of such societies in Austria and 1,007 miscellaneous agricultural co-operative societies or 35.1 per cent of the total number in Austria.

The place occupied by Czech agriculture in the matter of co-operation indicates clearly the great effort which has been made by the Czech people to organize independent agricultural co-operative societies.

2 *Position of Agricultural Credit Societies* - The following figures show the rapid development of the Czech agricultural co-operative credit societies.

Year	Number of <i>Kampeličky</i> credit societies	Number of members	Capital	Reserve funds	Deposits
			in thousands of crowns		
1901	787	60,400	634	211	22,835
1912	2,516	250,564	2,708	3,159	200,959
1918	2,508	261,788	2,946	7,268	55,263

The majority of the *Kampeličky* credit societies are affiliated to the Central Union of Czech Agricultural Co-operative Societies, Prague II, Hybernská 20. This is now the largest non-German federation of co-operative societies in the whole of Central Europe.

The distribution of the *Kampeličky* credit societies amongst the different federations on 1 November 1918 was as follows:

Name of federation to which the <i>Kampeličky</i> credit societies are affiliated	Number of co-operative societies	Societies which furnished returns	Number of members	Capital	Reserve funds	Savings deposits	Deposits in current account
in thousands of crowns							
Central Union Prague Federation of Agricultural Co-operative Socie- ties, Prague	1,656	1,612	141,934	1,651	3,512	314,301	19,564
Central Union, Brno	219	227	24,465	130	145	25,136	1,170
Central Union, Brno	592	578	83,663	985	3,116	62,117	2,192
Central Union, Brno	29	29	3,986	83	254	9,391	15
Opava Union	72	48	7,740	95	258	18,594	418
Total	2,508	2,994	261,788	2,944	7,285	529,890	23,359

Even in abnormal circumstances the Kampeličky societies enjoyed the complete confidence of their rural depositors. Their deposits steadily increased, particularly during the War, but this must be attributed, it is true, to a greater circulation of money in general.

On 1 March 1919 the Central Union of Prague made a new inquiry into the position of the Kampeličky credit societies which are affiliated to it. The results were as follows.

Of 1,656 Kampeličky credit societies, 1,644 furnished returns. The capital was 1,657,000 crowns; the reserve funds, 3,973,000 crowns; the savings deposits amounted to 456,703,000 crowns; the deposits on current account to 13,272,000 crowns; the number of depositors was 318,411, so that the average sum on deposit was 1,454 crowns. This average shows that the societies have reached particularly the class of small farmers and agricultural labourers.

Before the War, the Kampeličky societies had invested about 90 per cent. of their deposits in loans granted to their members; the remainder was deposited with the Federation. At present the proportion is reversed. The societies have 32,163,000 crowns invested in loans granted to members; 6,616,000 crowns in securities; 6,969,000 crowns in mortgage loans, whilst the balance, 402,657,000 crowns, is deposited with the Central Union at Prague or with other institutions.

A similar development has taken place amongst the German Raiffeisen societies. These are affiliated to three federations having their headquarters at Prague, Brno and Břilsko (now at Opava) respectively. The greater number were formed a little earlier than the Czech societies, and financially they are somewhat stronger. Latterly, however, their development has not been so rapid as that of the Czech Kampeličky societies.

The statistics of the German credit and savings societies are as follows :

Year	Number of societies	Number of members	Capital	Reserve funds	Deposits
in thousands of crowns					
1911.	711	56,000	1,092	479	46,498
1912.	1,072	123,000	2,167	3,163	170,911
1918.	1,107	155,543	2,086	6,945	113,576

The position of the federations of Raiffeisen societies on 1 November 1918 was as follows :

Names of federations to which the societies are affiliated	Number of societies	Number of returns furnished	Number of members	Capital	Reserve funds	Savings deposits	Deposits on current account
in thousands of crowns							
" Zentralverband " Prague	674	617	82,981	2,056	3,613	275,573	21,120
" Zentralverband " Brno	296	214	33,850	621	2,150	111,257	7,788
" Verband " Břsko . .	137	25	16,701	307	852	56,716	2,468
Total . . .	1,107	856	135,538	2,886	6,945	443,576	31,676

Taken together we have the following aggregate statistics for the co-operative credit societies of Bohemia, Moravia and Silesia :

Year	Number of societies	Number of members	Capital	Reserve funds	Deposits
				in thousands of crowns	
1901	1,498	125,000	1,726	600	69,231
1912	3,588	373,621	1,875	6,622	400,003
1918	3,705	390,323	5,032	11,233	996,830

To indicate the importance of these figures which show the strength of co-operative credit in Czechoslovakia, it may be added that the local societies are developed by their own resources. They are entirely independent in their financial business, being able to count only upon their own resources or those which the inhabitants of the district supply to them. The rural classes have need of them ; they have formed them themselves and have maintained them with complete confidence in them, so that these societies are very strongly rooted in the economic life of the Czech country districts. They have become the mainstay of Czech agriculture and it is possible, thanks to them, to continue to extend co-operation to other branches of the economic activity of the farmers.

The network of *Kampeličky* societies is now complete in the whole State, covering all the country districts, even to the most remote mountains. A great number of the *Kampeličky* societies are endeavouring, moreover, to improve the mortgage debts of agricultural undertakings. They facilitate the transfer of mortgage debts from various institutions to the territorial mortgage bank, which grants mortgage loans which cannot be called up and are repayable by instalments. Moreover most of them are at the same time agents for the Territorial Insurance Fund in Bohemia. This national institution, which does not seek to make profits, carries

out old age insurance on philanthropic lines.

Almost all the local societies also make purchases of agricultural requisites (fertilizers, coal, feeding stuffs, machines, seeds, etc.). In addition to their economic activity, they establish libraries, organize lectures, etc.

3. *Position and Work of the Agricultural Federations.* — As the Kampeličky societies developed their federations also developed. The following table contains aggregate figures showing the growth of the federations :

Year	Number of affiliated Kampeličky societies	Other affiliated co-operative societies	Capital	Deposits	Turnover
			in thousands of crowns		
1903	1,081	812	128	10,652	110,684
1911	2,101	1,150	1,029	51,603	662,172
1918	2,576	1,214	8,051	521,253	4,718,803

The aggregate reserve funds of these federations amounted to 1,097,000 crowns in 1913 and to 4,318,000 crowns in 1918.

The figures for the Central Union of Agricultural Co-operative Societies for 1918, which are included in the above table, were as follows : Affiliated Kampeličky credit societies, 1,054 ; other affiliated co-operative societies, 430 ; capital, 5,664,300 crowns ; reserve fund, 1,514,557 crowns ; deposits, 284,586,807 crowns and turnover 1,546,262,753 crowns ; assets, 324,776,187 crowns. At the end of 1920 the deposits amounted to 460,000,000 crowns. The deposits come solely from the affiliated Kampeličky societies and other co-operative societies which consider the Union as their central bank ; on the one hand they deposit their surpluses with it and on the other they apply to it for the credit which they require. The Central Union, speaking generally, assures the service of making payments in Czech agriculture. It also extends its activity to public credit transactions.

Its main business, according to the Law of 1903, is the legal inspection of the affiliated co-operative societies. This work is not confined to auditing their books. It supervises also the commercial and technical management of the societies by means of inspectors who are specialists in the different branches (e. g. co-operative dairy societies, co-operative societies for the drying of chicory, co-operative mills, co-operative societies for the production and distribution of electricity, etc.). This work also includes the auditing of the accounts of the co-operative societies affiliated to the Central Union. This is a temporary arrangement, which was made on account of the inadequate number of officials during and after the War. The Central Union is also very active as an advisory body and represents the interests of the co-operative societies before the legislature and the public administration. It compiles statistics of the co-operative societies and publishes special co-operative journals, besides pamphlets and other publications on co-operation. During the first

year after the foundation of the republic it established, with the aid of a subsidy from the Ministry of Agriculture, a higher school of agricultural co-operation for the instruction of the employees and officials of co-operative societies. The course is for one year, and is attended, for the most part, by pupils of secondary schools. The instructors are drawn on the one hand from persons engaged in the management of the Central Union and on the other hand from the teaching staffs of the Universities and technical schools. The interest aroused by the schools gives ground for hoping that it will be attended not only by Czechoslovaks, but by other Slavs, notably Yugoslavs and Russians. A course of two months is also given at the school for persons who are already engaged as employees of co-operative societies. Lastly, the school organizes in the provinces and country districts shorter courses, the principal object of which is to give practical information to the largest possible number of employees and officials of the co-operative societies, and practical advice regarding the account keeping and management of co-operative credit societies and other co-operative societies.

The Central Union is, at the same time, a wholesale society for the societies which are affiliated to it. The co-operative stores, the co-operative societies for the purchase of requisites and the co-operative mills are grouped in a section which supplies agricultural requisites wholesale to the co-operative societies and to the *Kampeličky* credit societies and which undertakes the marketing of their produce. The work of the Union extends beyond the boundaries of the Republic both in regard to the direct purchase of agricultural requisites (fertilizers, certain kinds of agricultural machinery, feeding stuffs, seeds) and in regard to the sale to other countries of agricultural produce (oats, seed-grain, seeds, etc.). Even during the War, the co-operative stores thought it necessary, in the interest of the food-supply of the country, to undertake the purchase of the grain requisitioned by the State for the Grain Office; the Central Union thus played the part of a commissary general, at the same time defending the interest of the co-operative societies. After the foundation of the Republic, the co-operative societies and the Central Union were utilized to a much greater extent in the purchase of grain and potatoes after the acceptance of the demand made by the farmers that the State-regulated purchase of grain and potatoes should be entrusted to the co-operative societies. The distribution of fertilizers amongst the dealers, which from that time was submitted to a certain official control, was also entrusted to the Central Union. The Union also served as intermediary between the co-operative societies and the army for the supply of hay and of straw.

The more the difficulty of obtaining coal increases, the greater becomes the desire, particularly in the country districts, to have electricity. It is interesting to note that electricity will be supplied in the country mainly by co-operative societies formed for this purpose. They will form federations, either by themselves or together with the communes, which will be in a position to lay down secondary lines at their common expense and this will tend to equalize the very different rates charged in the

various communes and so generalize the use of electricity. This work is directed by the electricity section of the Central Union. The purchase of plant for the majority of electric undertakings in the Republic has been entrusted either to the Central Union or to the Electricity League of Central Bohemia. The electricity section of the Central Union has been entrusted, on the initiative of the purchase section, with the purchase of electric plant until such time as the electric undertakings and the Central Union can form an independent co-operative society for this purpose. The Central Union enters into commercial relations with the principal firms in the world. In this field alone, its turnover for the first five months of 1920 was 60,000,000 crowns.

The Central Union also has special sections for the co-operative weaving societies, the co-operative distilleries, the co-operative societies for the manufacture of potato flour, the co-operative dairies and the co-operative distributive societies. These sections undertake the joint marketing of the produce of the societies or the joint purchase of raw material or plant. The work of these sections, though independent from the commercial point of view, must not go beyond the scope of the general work of the Central Union. The business development of the Central Union proceeds slowly but steadily and regularly, as may be seen from the following table, which shows the purchase and sales of various products and raw materials :

<u>Year</u>	<u>Wagon-loads</u>	<u>Millions of crowns</u>
1901	932	0.28
1905	6,115	3.9
1910	12,576	7.4
1915	16,781	11.1
1916	13,650	10.1
1917	16,875	13.2
1918	15,080	16.7
1919	27,232	107.4
1920	47,066	420

The other co-operative federations carry on work identical with that of the Central Union but on a smaller scale.

The development of the federations of German co-operative societies is analogous to that of the Czech federations as may be seen from the following figures :

German Federations.

Year	Affiliated Raiffeisen societies	Other affiliated co-opera- tive societies	Capital	Deposits	Turnover	Reserve funds
in thousands of crowns						
1903	845	96	80	14,130	101,130	-
1911	1,073	1,073	130	47,873	211,230	217
1918	1,123	1,123	558	262,834	2,031,404	967

Their work is similar to that of the Czech Federations. The Brno Federation, during the War, extended its work to the insurance of various risks for the members of its affiliated societies. This example was partially followed, with some modifications, by the Prague and Opava Federations. The Brno Federation also undertakes agricultural work properly so-called (land improvement, etc.).

In general the German Raiffeisen societies are stronger than the Czech societies. Their field of action is larger than that of the Czech societies; their financial resources are more considerable. On the other hand, they are much less numerous. It must not be forgotten, too, that in respect of Czech agriculture, the district agricultural loan banks work very actively side by side with the co-operative credit societies, whereas the German civil loan banks have only a secondary importance.

4. *Position of the District Agricultural Loan Banks.* — The following figures give an idea of the development of the Czech district loan banks in Bohemia:

Year	Number of banks	Number of members	Owned capital	Reserve funds	Deposits
in thousands of crowns					
1890	98	123,091	5,710	171	15,608
1900	119	161,191	13,085	2,079	71,957
1913	125	195,308	14,135	7,329	212,118
1917	125	207,054	14,079	11,128	149,300

The number of German banks in Bohemia was 41 in 1903, 42 in 1911 and 42 in 1917. Their capital was 3,244,000 crowns in 1911 and 3,152,000 crowns in 1917. Their reserve funds were 960,000 crowns in 1911 and 1,240,000 crowns in 1917. The deposits amounted to 9,098,000 crowns in 1903, to 17,515,000 crowns in 1911 and to 29,810,000 crowns in 1917. The total number of members in 1911 was 45,473.

In Moravia, there still exist the so-called tax funds. According to the latest statistics, which refer to 1902, there were 339 Czech funds and 87 German funds; the aggregate capital was about 22,000,000 crowns. In

Silesia there are 103 of these funds, with 3,000,000 crowns of capital. These institutions confine themselves to granting loans to farmers, generally in the form of mortgage loans; only a very small number of them accept deposits. They have remained without much importance for agricultural credit, though they would doubtless have shown considerable progress, such as that shown by the district banks, had they been combined into district organizations. It is only now that it is proposed to group these small financial units to form a single institution.

5. *Provincial Credit Fund for Small Farmers and Small Manufacturers.* — The Provincial Credit Fund for Small Farmers and Small Manufacturers at Prague has a special position. It was founded in 1898 by Bohemia with the object of obtaining credit for agricultural and vocational co-operative societies. The endowment given by Bohemia was 1,000,000 crowns; a loan at 3 per cent. was also granted to it by the *Zemská Banka* of Prague. The work of the Fund for the benefit of small farmers only began to be developed at the beginning of 1908, when it began to receive deposits from the district banks and from the agricultural co-operative societies.

The following table contains some statistics showing its development:

Year	Foundation capital	Reserve Fund	Deposits	Liabilities
	in thousands of crowns			
1899	95	5	—	106
1908	1,135	66	1,408	2,796
1911	1,213	74	7,088	14,121
1918	1,239	268	103,527	185,026

This Fund was established as the nucleus of the future provincial co-operative bank which, like the Fund for Small Manufacturers, was to base its work above all upon the agricultural and other co-operative societies.

The organization of agricultural credit has often received help from the Fund for Small Farmers. It is understood, however, that the allocation of this fund must be fixed by agreement with the other federations of agricultural co-operative societies when the re-organization of the entire financial system of Czechoslovak agriculture is undertaken.

6. *Position of Co-operative Societies other than Credit Societies.* — The agricultural cooperative societies other than credit societies may be classed as follows:

Kinds of co-operative society	Czech			German		
	1909	1912	1918	1909	1912	1918
Co-operative dairies	182	173	166	72	90	104
Co-operative stores, co-operative societies for the purchase of requisites, co-operative societies for the sale of produce, co-operative mills	96	127	167	35	41	73
Co-operative societies for the cultivation and sale of vegetables, co-operative vine-growers' societies	17	18	18	11	4	2
Co-operative distilleries	26	25	61	13	12	20
Co-operative flax-growers' societies	30	23	25	15	33	13
Co-operative chicory-drying societies . . .	25	32	32	—	—	—
Co-operative societies for the breeding and sale of live stock, co-operative grazing societies	103	96	68	68	78	83
Co-operative societies for the joint use of machinery or for weighing	188	199	136	45	37	33
Co-operative societies for the supply of electricity	2	20	80	—	4	6
Co-operative societies for the manufacture of potato-flour and co-operative societies for the dessication of potatoes	—	10	12	1	2	4
Co-operative building societies	—	39	35	—	1	2
Co-operative distributive societies and societies for the supply of domestic requisites	—	65	82	—	4	4
Miscellaneous co-operative societies	7	55	42	1	16	17
Total . .	676	896	924	211	302	361

These co-operative societies give the following aggregate figures

	Czech co-operative societies			German co-operative societies		
	1909	1912	1918	1909	1912	1918
Members	71,327	109,314	100,764	22,229	36,117	35,770
Paid-up capital (crs.)	4,438,000	10,451,000	20,316,800	2,175,000	2,553,000	3,989,000
Reserve funds (crs.)	2,034,000	3,592,000	12,476,000	886,000	808,000	3,336,000

To indicate the importance of the principal kinds of co-operative societies we give the following figures relating to co-operative dairy societies :

Societies	Number of societies	Number of members	Total working capital	Paid up share capital	Reserve funds	Milk supplied (thousands of litres)
			in thousands of crowns			
Czech societies in 1909	182	19,187	3,007	887	1,206	81,721
" " 1912	173	17,721	3,002	908	1,508	61,219
German societies in 1909	72	11,566	2,069	906	316	48,123
" " 1912	90	13,541	2,592	957	160	16,000

Before the War the Czech co-operative dairies had a somewhat difficult position, often caused by the imperfection of the technical equipment and of the business organization. This was true in particular for the societies in Bohemia; these societies were seriously affected by the War; it is only a short time ago that they have begun to extend their work.

On the other hand, the co-operative stores, the co-operative societies for the purchase of requisites and the co-operative mills are steadily progressing, particularly the Czech societies:

Societies	Number of societies	Number of members	Total working capital	Paid up share capital	Reserve funds	Goods supplied	Produce sold	Number of waggon-loads
			in thousands of crowns					Produce Requis- sites
Czech societies in 1909	96	33,206	2,550	916	657	7,659	3,521	— —
Czech societies in 1912	127	33,632	6,276	2,236	820	41,259	17,355	6,977
German societies in 1909	35	8,772	2,301	570	512	5,320	5,932	— —
German societies in 1912	41	11,206	2,111	498	368	11,001	3,381	3,900

For the years 1912 to 1919, the development of these co-operative societies is not known. During the War, they undertook the purchase of grain and potatoes for supplying the public, and this considerably strengthened them and increased their popularity. Having begun by the marketing of agricultural produce, these societies now carry on a number of undertakings, such as mills, bakeries, brickfields, sawmills, etc. In certain regions, notably in Moravia, stores were established by the co-operative societies during the War in the form of societies with limited liability. However it is the form of co-operative society established under the Law of 1873 which always seems best to respond to the needs of agriculture.

On the Czecho-Moravian Plateau, the co-operative distilleries have considerable importance. They increase the returns from these mount-

ainous regions by the most complete utilization of the potatoes and facilitate stockbreeding by means of the residues which they resell or return gratuitously to their members.

The development of the co-operative distilleries is shown by the following table :

		Number of societies	Number of members	Paid up capital	Reserve funds	Total working capital
in thousands of crowns						
Czech societies in	1909	30	2,107	145	24	811
"	1912	35	2,467	1,438	79	3,760
German societies in	1909	15	1,173	94	9	292
"	1912	12	1,288	435	21	860

In spite of their great progress, the co-operative distilleries still only represent a very small minority relatively to the private undertakings and to the distilleries belonging to estates and large farms. There are at the present time in Czechoslovakia about 800 agricultural distilleries of which 420 are in Slovakia. The quantity of alcohol on which excise duty is paid by the agricultural distilleries is about 600,000 hectolitres. The quantity of alcohol on which the co-operative distilleries, numbering 81, pay duty is 41,272 hectolitres. According to the new law regarding the duty on spirits, each co-operative distillery will manufacture a quantity fixed at 600 hectolitres, so that in the aggregate they will manufacture 48,000 hectolitres. The production of the co-operative distilleries is thus 8 per cent. of the production of all the agricultural distilleries ; it is 17 per cent. if Slovakia be not taken into account. This percentage will be considerably increased by the agrarian reforms ; the greater number of the distilleries belonging to large estates will become co-operative distilleries.

The co-operative societies for the manufacture of potato-flour are akin to the co-operative distilleries with which they are, in some cases, combined. They only occupy, however, a modest place amongst the private potato-flour factories. There exists a certain number of small starch-factories, for the manufacture of liquid starch, but they have only a very weak position in the business. In all, there are in Czechoslovakia 128 factories producing liquid and dry starch, 20 factories producing syrup and grape sugar and 11 factories for producing dextrine and other derivatives ; of these undertakings 22, most of which are important, are in Slovakia. In the first class of factories, there are only 8 co-operative societies for the manufacture of potato-flour. Amongst the starch-factories, there are three co-operative factories and there is one co-operative dextrine factory. Of all the 168 undertakings in the former Austria, 159 were in the lands which now form the Czechoslovak Republic.

The co-operative chicory-drying societies, all of which are Czech, are very prosperous. The following table contains some figures relating to them:

Year	Number of societies	Number of members	Total working capital	Paid up share capital	Reserve funds	Quantity of chicory treated (quantals)
in thousands of crowns						
1909	25	2,530	1,517	657	39	464,438
1912	32	2,533	2,209	868	71	609,151

Chicory-drying is done by drying factories which are either co-operative, or the property of private chicory-dryers, or the property of the sliced root factories. There are at the present time 24 private drying factories, 34 co-operative societies and 17 factories belonging to sliced root factories. The following figures indicate the production of these factories: in 1917 all the factories produced 2,107 waggon-loads of dried chicory, of which 1,032 waggon-loads were produced by the co-operative chicory drying societies, 667 waggon-loads by factories belonging to sliced root factories, and 308 waggon-loads by private drying factories. On the average the co-operative factories produced 55 per cent. of the total quantity, the drying factories belonging to the sliced root factories 33 per cent. and the private drying factories 12 per cent. The co-operative societies dry on the average 1,300 waggon loads per annum. In Czechoslovakia there are at the present time 44 sliced root factories, capable of producing 6,000 waggon-loads of sliced dried chicory root; 25 of these are small private factories; 15 belong to co-operative societies of various kinds and the remaining 4 belong to independent co-operative societies. The owned capital of the co-operative chicory-drying societies amounted in 1917 to 2,580,000 crowns and that of the co-operative sliced root factories was 3,600,000 crowns. The co-operative chicory-drying societies now contain nearly 4,000 members.

The greater number of the agricultural co-operative societies do their business through the federation under whose supervision they have placed themselves. The War has greatly encouraged this centralization by compelling the co-operative societies which up to then had not been affiliated to any federation to become members of a federation.

Side by side with the commercial centres of the various kinds of co-operative societies which have been referred to above, there has recently been formed a section for co-operative weaving societies of the Central Union at Prague. These societies are composed of persons who carry on weaving as a home industry and serve as their intermediaries in the purchase of cotton and in the marketing of the cloth. Another section of the same Union has been formed for the co-operative societies which supply, particularly in the provinces, articles of domestic consumption such as shoes, dress-stuffs, etc.

7. *Progress of the Co-operative Societies since the Proclamation of Political Independence.* — A revival of activity has taken place in co-operation since the formation of the Czechoslovak State. It is particularly co-operative distributive societies, co-operative building societies and vocational and agricultural co-operative societies which have been formed. But a still greater progress is to be noted in the internal strengthening of the individual societies and of the central unions.

The following statistics, compiled from the declarations made to the commercial courts show the changes which have taken place in the number of co-operative societies during the years 1918 and 1919.

	Total number of co-operative societies	Co-operative societies with limited liability	Co-operative societies with unlimited liability	Number of <i>Kampeľický</i> credit societies	Number of agricultural co-operative societies	Number of vocational co-operative societies	Number of co-operative building societies	Number of co-operative distributive societies	Number of Schulze-Delitsch credit societies
Bohemia, Moravia, Silesia :									
1 January 1918	8,185	4,052	4,133	3,803	1,073	699	354	911	1,331
1 January 1919	8,357	4,223	4,134	3,805	1,086	741	350	985	1,343
1 January 1920	9,238	5,087	4,151	3,822	1,203	1,035	519	1,176	1,397
Slovakia :									
1 January 1920	1,235	1,235	—	405	58	23	—	719	—
Sub - Carpathian Russia :									
1 January 1920	180	180	—	95	18	13	—	54	—
Total for Czechoslovakia :									
1 January 1920	10,653	6,502	4,151	4,322	1,279	1,071	519	1,970	1,397
1 January 1921	12,336	8,153	4,173	4,366	1,640	1,480	900	1,979	1,450

In 1921 there were also 9 miscellaneous co-operative societies (35 in 1920) and 28 co-operative federations (21 in 1920).

These figures were compiled by the Central Union of Agricultural Co-operative Societies at Prague (*Ústřední jednota hospodářských družstev v Praze*) from the official declarations of the registration and the cancelling of the registration of co-operative societies. They show clearly the directions in which co-operation is developing in the Republic.

The co-operative agricultural credit societies do not show any appreciable change; the network of *Kampeľický* credit societies was almost complete before the War; the creation of new societies is not therefore necessary; it is only necessary to complete the existing organization.

The Schulze-Delitsch credit societies and the civil credit banks show a considerable increase. They are being formed to meet the growing needs of industrial circles, and particularly the small manufacturers who wish to have their own special credit banks.

Being formed in localities where a similar credit bank is already at work, the field of action of the new credit banks remains for periods more or less long somewhat restricted.

The co-operative credit societies, then, are hardly increasing in number. On the other hand an intense activity is noticeable in regard to the extension of the work of the existing co-operative credit societies and of the business of their federations.

On the contrary many new vocational co-operative societies, co-operative distributive societies and co-operative building societies are being formed.

The vocational co-operative societies include the very numerous productive societies formed by disabled service men. They were often formed in haste and there is reason to doubt their vitality. It seems that the disabled service men see in co-operative productive societies the principal means of assuring themselves a livelihood. Even if some of these societies, composed of comrades who have fought side by side, who know and understand one another, may prosper under prudent management, it must be recognized that many of them have a charitable rather than a commercial basis, which may be prejudicial to the organization of their business.

The co-operative building societies also show a very considerable increase, which was to be expected in view of the extraordinary scarcity of houses and flats in the towns and in the country. The State subsidies and the guarantees given by the State for loans hasten this development considerably. The majority of the co-operative building societies are affiliated to a Central Union which acts as supervisor, as adviser and as intermediary for the purchase of building materials. But in spite of the large number of these co-operative societies and although many towns have drawn up excellent plans for municipal building, there is hardly any building going on, owing particularly to the want of available credit. As at the present time the rate of interest has reached a height which was unknown before the War, it may be anticipated that very few of these societies will be able to develop much activity.

The co-operative distributive societies have undergone great changes. The increase in the number of these societies (265) does not represent the full increase in their strength. Their principal federation, the Central Federation of the Czechoslovak Co-operative Distributive Societies (*Ústřední svaz československých družstev konsumních*) does not form small co-operative distributive societies, but encourages the amalgamation of isolated societies into co-operative societies embracing a whole region. Such are the societies of Plzeň, Brno, and Moravská Ostrava, which contain so great a number of members that they can compare with the largest co-operative distributive societies in Europe; in some places these large co-operative societies supply as many as 250,000 persons. ●

On the other hand, other groups of co-operators form local co-operative distributive societies which often even confine themselves to the members of a political party, but these societies cannot hope for any great success.

The small increase (130) in the number of agricultural co-operative societies is due, in the main, to the formation of societies for taking collective leases of land; these are established by the social-democratic party, which sees in them a step towards the realization of its collectivist programme, in so far as the land is concerned. However, these tendencies encounter strong opposition in the character of the Czechoslovak small farmers, who wish to make the large estates their own individual property. Amongst the other agricultural co-operative societies of which the number is increasing at present, may be mentioned the district co-operative stores and the co-operative societies for the supply of electricity.

It may be added that it is particularly the Czechoslovaks who take part in this movement. Of 1,053 co-operative societies formed in 1918 and 1919 barely 100 were German societies.

ITALY.

CO-OPERATIVE LAND-HOLDING SOCIETIES. (1)

SOURCES :

BELLUCCI (Prof. Adolfo) : *Come si risolve la questione agraria in Romagna*. Ravenna, Tip. Ravennana, 1920.

CARNAROLI (Dott. Emiliano) : *La cooperazione agraria nel Veneto. La Cooperazione Agricola*, No 5-6. Bologna, 1 March 1920.

(1) We have hitherto rendered the Italian expression "*affittanza collettiva*" by the expression "collective lease," which is approximately a literal translation. Though originally referring to the form of tenure under which societies of agricultural labourers occupied land, the expression "*affittanza collettiva*" came to be applied to the society itself. The societies, however, also occupy land by other tenures, such as ownership or produce-sharing tenancy (*mezzadria* or *colonia parziaria*), so that the expression does not always correspond even to the form of tenure. The expression "*affittanza collettiva*" is commonly applied to all societies which, as such, occupy land, whatever may be the form of tenure, but its unsuitability has been recognized and the expression "*cooperativa agricola*" is sometimes substituted for it. This has the disadvantage of being a specialized use of an expression which has also a wider meaning. We have thought it better to adopt the expression "co-operative land-holding society" as a translation both of "*affittanza collettiva*," when it refers to the society and not to the form of tenure, and of "*cooperativa agricola*" when used in the specialized sense. The expression "co-operative farming society" has been used in some English publications as a translation of "*affittanza collettiva*," but it suggests that the society itself farms the land and this is only true of the "*affittanza collettiva a conduzione unita*." It should also be noted that when we speak of "labourers' societies" in this connection, the word labourer is a translation of the Italian "*lavoratore*" and is to be understood in a wide sense and not as applying merely to wage-earning labourers; it includes produce-sharing tenants (*coloni*) and even small peasant-proprietors.

- CANALINI (Mario): Il credito alle cooperative agricole. *Il Villaggio ed i Campi*, No. 47. Milan-Rome, 27 November 1920.
- DEL BU (Carlo): Le affittanze collettive in Senato. A proposito delle recenti discussioni. *Cooperazione Popolare*, No 1. Rome, 2 January 1921.
- DRAGO (Giuseppe): Relazione sul movimento cooperativo in Sicilia. Catania, 1921.
- E. C.: Indole e funzionamento delle affittanze collettive. *Cooperazione Popolare*, No 26. Rome, 24 June 1921.
- PARABOLI (Giovanni): La Società anonima cooperativa agricola di lavoro di Fontanelle (Parma). *La Cooperazione Agricola*, No 3-4. Rome, 15-28 February 1921.
- GORNI (O.): La bonifica del latifondo e lo Stato. *La Cooperazione Italiana*, No 1439. Milan, 11 February 1921.
- FAVRANI (Dott. Egisto): La cooperazione agricola nel Veronese. *La Cooperazione Agricola*, No 5-6. Bologna, 1 March 1920.
- PINOTTI (Alfredo): La cooperazione nel Reggiano. *La Rivista della Cooperazione*, No 6. Rome, June 1921.
- PIPTONE (Francesco): La cooperazione in Sicilia. *La Cooperazione Siciliana*, No 12. Palermo, 20 December 1920.
- RIGUZZI (Biagio): La conduzione privata e la conduzione cooperativa della terra. *La Cooperazione Agricola*, No 7-8. Rome, 15-30 April 1921.
- ROSSETTI (Dott. Enrico): L'Associazione generale degli operai braccianti del Comune di Ravenna. Reprinted from *La Rivista della Cooperazione*, No 6. Rome, June 1921.
- SALSI (Italo): Movimento cooperativo agricolo della provincia di Parma. Relazione sull'esercizio 1919. Parma, 1920.
- SAMOGGIA (Massimo): La proprietà terriera delle cooperative. Perché si formi e perché sia conservata. *La Cooperazione Agricola*, No 3-4. Rome, 15-28 February 1921.
- SERPIERI (Arrigo): Studi sui contratti agrari. Bologna, Zanichelli, 19 0.
- VASSALLO (Dott. Cesare): Stato della cooperazione agricola in Sicilia. *La Cooperazione Agricola*, No 23-24. Bologna, 15 December 1920.
- VIRGILI (Filippo): Le affittanze agrarie cooperative. *La Riforma Agraria*, No 6. Parma, June 1921.
- IL MOVIMENTO COOPERATIVO IN ITALIA. Ufficio statistico della Lega Nazionale delle Cooperative. Milan, 1920.
- LE AFFITTANZE COLLETTIVE IN ITALIA. Federazione Nazionale delle Cooperative Agricole. Bologna, 1920.
- COOPERATIVE AGRICOLE DEL RAVENNATE. *Il Giornale d'Italia Agricolo*, No 49. Rome, 19 December 1920.
- IL CONSORZIO AUTONOMO DELLE COOPERATIVE DELLA PROVINCIA DI RAVENNA. Relazione del Consiglio d'Amministrazione nella seduta del 24 aprile 1921. *Il Sindacato Cooperativo*, No 19. Roma, December 1920.
- LA GRAVE QUESTIONE DEL LATIFONDO E LA COOPERAZIONE. *La Cooperazione Italiana*, No 1425. Milan, 5 November 1920.
- LE COOPERATIVE PER ACQUISTO E FRAZIONAMENTO DELLA TERRA. Banca del Lavoro e della Cooperazione. Milan, 1921.
- FEDERAZIONE NAZIONALE DELLE COOPERATIVE AGRICOLE. ASSEMBLEA GENERALE DEI SOCI. RELAZIONE DEL CONSIGLIO DI AMMINISTRAZIONE PER IL 1920. Bologna, 1921.
- MOVIMENTO COOPERATIVO PARMENSE DI CONSUMO E AGRICOLO. Relazioni al Congresso 5-6 June 1921. Parma, 1921.
- LE COOPERATIVE PER LA CONDUZIONE DEI TERRENI NELLA PROVINCIA DI MANTOVA. *La Cooperazione Agricola*, No 9-10. Rome, 15-31 May 1921.
- RELAZIONE PRESENTATA ALL'ASSEMBLEA GENERALE DEL CONSORZIO PROVINCIALE DELLE COOPERATIVE AGRARIE DI BOLOGNA. *La Cooperazione Agricola*, No 9-10. Rome, 15-31 May 1921.

In discussing the new tendencies which have manifested themselves in the modification of agricultural agreements (1) we had occasion to note that one of the most striking and characteristic features of Italian rural economy since the war has been the great movement whereby the status of the peasantry is being raised towards that of independent farmers. This movement takes place in various ways, beginning with the various forms of limited participation in the business of the farm and passing to tenancy and to ownership, and has assumed a notable development in the form of co-operative land-holding societies (*affittanze collettive*). Although we have already spoken of this development (2), the desirability of better fixing the principal types, of indicating the more important problems concerning them and of bringing up to date the information previously published, induces us to return to the subject.

§ 1. THE VARIOUS TYPES OF CO-OPERATIVE LAND HOLDING SOCIETY.

The co-operative land-holding societies, as the reader is aware, are associations of agricultural labourers formed for the purpose of obtaining the use of land to cultivate. This is done in most cases by means of a letting agreement, but in some cases by means of a produce-sharing agreement (*mezzadria*, *terzeria*, etc.) or by means of a purchase agreement. These different methods result in three distinct forms: collective leases (*affittanze collettive*), collective produce-sharing tenancies (*mezzadrie collettive*), and collective ownership (*proprietà collettiva*). It is, however, customary to apply the term *affittanza collettiva* to the association which undertakes the management of the land, whatever may be the form of agreement by which the land has been obtained.

As they spread throughout the country — and it is this which it is important to make clear — the co-operative land-holding societies had to adapt themselves to the different methods of obtaining and occupying land in vogue in different districts. Thus, when the landowners were willing to let to the agricultural labourers' societies land already organized and equipped for cultivation as produce-sharing or other tenancies (divided, that is, into holdings each of which is entrusted for cultivation, under a special agreement, to a family of produce-sharing tenants or of rent-paying tenants), societies of produce-sharing or other tenants were formed for taking collective leases of land for cultivation in separate holdings (*affittanze collettive a conduzione divisa*). Of this form, of which we shall presently speak more fully, some examples are to be found in the provinces of Reggio Emilia and of Bologna and a larger number in the province of Milan and of Bergamo; it is now beginning to obtain a foothold also in Tuscany.

In like manner the co-operative land-holding societies, as they began to spread in Sicily, in Southern Italy (Apulia, Calabria) and in Latium,

(1) See our issue of November 1920.

(2) See our issues of May and August 1918 and of August-September-November 1919.

had to adapt themselves either to the local conditions in regard to land tenure (*latifundia*), or to the usual agreements for the hiring of land, or even to the needs of the labourers of those regions. The labourers there aspire, not so much to take up general farming on their own account, as to have at their disposal a piece of land on which they can cultivate produce mainly for their own consumption. The agricultural labourers' associations are therefore formed for the purpose of renting a farm or part of a farm, but the land is afterwards divided into lots and distributed amongst the members with special agreements. Even this type of co-operative land-holding society may be considered as being worked on the system of separate management, but, in comparison with the lands already divided into holdings previously referred to, there are in this case not only a different reason for the labourers' associations and a different origin, but even a different organization of the lands rented. We may call this form the co-operative land-holding society worked on the allotment system (*affittanza collettiva ad azienda quotizzata*).

After these remarks we may pass to speak briefly of the working of the various types of co-operative land-holding society.

(a) *Co-operative Land-holding Societies with Joint Management.* --- In this case the farm is managed and carried on directly by an association of agricultural labourers as a single undertaking, on the same lines as the economically managed large holdings of North Italy. The individual farmer is replaced by the society which has taken the farm. Like the farmer, the society has at its disposal the land and a fixed working capital; it engages a permanent staff, with yearly wages, to look after the stock and the machinery; it engages casual labourers by the day at so much per hour — and, for some crops, with an agreement for sharing in the produce — for carrying out other work on the farm; but with this difference that the staff, whether permanent or casual, is selected from among the members. A worker on the farm, as a member, has a right to share in the net profits of the undertaking; as a worker he has only a right to his wages and to the agreed proportion of the produce. The societies provides for the management and direction of the farm through its committee and officers; often also by means of persons specially engaged (technical manager, accountant) and paid according to the terms of a special agreement. If a society has rented more than one farm, a manager is placed over each of them to direct and supervise the work.

In regard to the labour required, we must consider the cases in which the number of members is either more than sufficient for the work to be done or is insufficient. In the first case, which is the most usual, the work is done by the members in turn, taking account, however, of their circumstances. The members who are not employed on the Society's farm go to work on private farms. In the second case, the society engages such additional labourers as may be required. But in general the tendency is to take land in proportion to the number of members and to the labour available in the district, so as to avoid unemployment.

As to the wages paid to the permanent and temporary staff, the socie-

ties adopt the local rates. As surety for the obligations assumed by the society towards third parties and to overcome the initial difficulties of the undertaking, in some societies a portion, varying from 10 to 25 per cent., of the wages is held back, being treated as a loan for an indefinite period made by the member to the society; in other societies a special reduced rate of wages is adopted; in others it is required that each member shall do a certain number of days work on the society's farm, either without payment or by way of loan for an indefinite period or as a means of acquiring new shares in the society.

(b) *Co-operative Land-holding Societies with Separate Management.* — In this case the land is divided into so many small holdings, each of which is provided with a dwelling-house, with outhouses and other buildings required for the farm or the family which cultivates it (cellar, bakehouse, pig-sty, henhouse, etc.). On each holding the crops are grown in rotation and the meadow always occupies an important place. The holding is generally taken under a produce-sharing agreement, but sometimes it is rented. In the former case the landlord supplies the land, paying the taxes upon it, part of the fixed capital (stock and machinery), paying a proportion of the taxes, and part of the working capital: the tenant supplies all the labour, part of the fixed capital and part of the working capital. The produce and the profits are divided between landlord and tenant in proportions which vary according to the district and according to the nature of the produce. The holding is managed by the landowner, either directly or through an agent.

In the case of rented land the working of the holding is simpler; the landlord gives the land for a fixed yearly rent, paying all the taxes upon it; the tenant supplies the fixed and working capital (paying the corresponding taxes) and the labour and manages the holding. The produce and the profits belong to the tenant.

The member who takes a holding is responsible to the society, which, in turn, is responsible to the landowner for all the members, in regard to the payment of the rent or the fulfilment of the terms of the agreement.

In the interest of the members generally and to make it possible to introduce on each holding the technical means which the individual members would not be in a position to adopt, the society provides for the collective purchase of agricultural requisites, for the sale of produce, for the carrying on of those industries, such as wine-making and cheese-making, which cannot be carried on by individuals, and for the purchase and joint use of costly machinery. The society, moreover, through its committee and officers and even through persons specially engaged undertakes the technical management of the land.

(c) *Co-operative Land-holding Societies Worked on the Allotment System.* — It has been noted that this form of co-operative land-holding arises most often through the renting, either by direct agreement or by a decree of the prefect, of large holdings (*latifondi*) or parts of such holdings. Many labourers' associations belonging to this group were formed in 1919 in Apulia, Calabria, Latium and Sicily, to take advantage of the

decrees issued by the Government during the war (Decree of 14 February 1918 on Agricultural Mobilization) and after the war (Decree of 2 September 1919 on the Requisition of Uncultivated or Badly Cultivated Lands) whereby farmers who were not cultivating their lands on lines which corresponded to the exigencies of the moment were compelled to modify their methods of cultivation in order to meet those exigencies under penalty of the requisition of the land and its subsequent assignment to labourers' associations, subject to the payment of rent through the Government to the landowner. In accordance with these decrees, many farms were requisitioned and assigned to agricultural co-operative societies in various parts of Italy, but particularly in the four regions mentioned.

The working of the large holdings is well known. Most of the land is laid down to grass, and there are a few buildings for the permanent staff (managers, watchmen, herdsman). The grass-land is grazed by the farmer's stock. Cereals are cultivated either directly, by means of casual labourers, or under produce-sharing agreements in which the farmer confines himself to supplying the land (all the rest being supplied by the sub-tenant), subject to the right to receive a share in the produce varying according to the locality and the productivity of the land. The casual labourers and the sub-tenants do not live on the land but often at a considerable distance from it.

When the management of a farm of this kind is undertaken by agricultural labourers' associations, the members aim at acquiring as much land as may be necessary to enable them to cultivate particularly the grain which may be necessary for their respective families during the whole year. The land is distributed as required amongst the members, who hand over to the society a part of the produce grown or pay it a rent proportionate to the total rent which the society pays to the landowner. To prevent this system from rapidly exhausting the fertility of the soil, some societies insist upon a rotation whereby the cultivation of grain alternates with that of an annual vegetable crop (beans, sula-clover).

The allotment-holders often furnish directly all the work necessary for the cultivation of the crops. Lately a tendency has shown itself to carry out jointly some of the more costly operations, such as motor-ploughing and threshing.

The society purchases chemical fertilizers and distributes them, for cash, to the members in accordance with their respective needs.

These are the principal types of Co-operative land-holding. We will now examine separately the problems which are most important in regard to them and give rise to keen discussion, the problems, that is, of credit, of the method of acquiring land to cultivate, and of assistance in management and in technical questions.

§ 2. CREDIT.

The co-operative land-holding societies being formed by labourers of small means must necessarily have recourse in large measure to credit in order to obtain a large part of the sums required for taking and working the

farms. It will be readily understood, in view of the great desire of the peasants to acquire land, of the high price of land and of the high rents, as well as of the equipment which is required for a scientific and intensive cultivation, that the need of credit has considerably increased in recent years. On the other hand, the necessity of organizing a service of credit suited to the special conditions and exigencies of this type of association induced the Government to create a Land and Agricultural Credit Section in the National Credit Institute for Co-operation, to which the agricultural co-operative societies principally have recourse (Decree-Law of 22 April 1920, No. 516). This section will undertake to furnish credit to the *università agrarie* (1) and agricultural labourers' associations legally recognized either in the form of co-operative societies or otherwise which are owners or tenants of land or have in any way obtained possession of land. As we noted in a recent article (2) the Section is authorized to carry on the following business: (a) To make loans of working capital for the management of land, the ordinary cultivation of land, or for the manipulation of produce; (b) to make loans for land improvement and for transformation from one kind of cultivation to another; (c) to make mortgage loans for the purchase of land, for the redemption of dues and for land improvement up to 80 per cent. of the purchase price or of the estimated value of the land. The Section has at its disposal a foundation capital of 50,000,000 liras, of which 25,000,000 liras were assigned to it by the State as a special contribution without interest, 15,000,000 liras contributed by the *Opera nazionale per i combattenti* and 10,000,000 liras by the National Social Insurance Fund. The State has also advanced other 50,000,000 liras in the form of a loan for working capital and contributes to the extent of 2 1/2 per cent. to the payment of interest on mortgage loans. When the Section has invested half of its own capital in mortgage loans it can issue land bonds to the amount of ten times the aggregate capital guaranteed by the mortgages, under rules similar to those which are in force for the bonds of land credit institutions.

The formation of this Section, marking the definite participation of the State in the work of financing these societies, is the most striking instance of the facilities which have been accorded to them. The Section is in fact, a kind of bank for the peasants' associations, established in Italy and authorized to carry on three forms of credit — for land purchase, for improvements, and for working capital. In view of the sum fixed, it may be considered as a first experiment which is being made and it is particularly important at the present moment in which all initiatives

(1) By this expression is understood the societies which have been formed in some communes in Latium and other provinces of the former Papal States for exercising and defending the communal rights of sowing, grazing, wood-cutting, etc. for the benefit of the rural community, or for the cultivation of the public lands, whether these are regulated by the Law of 4 August 1894, No. 397, or by the communal or provincial law, or by the provisions relating to corporate bodies.

(2) "Recent Legislation relating to Agricultural Credit," in our issue of May 1921.

are of value which tend to the better solution of the land problem, in the general interest of production.

Similar functions were assigned (Decree-law of 7 June 1920, No. 775) to the Agricultural Credit Section of the Bank of Sicily, in respect of the co-operative landholding societies of that region.

Further, as the co-operative societies become consolidated the possibility presents itself of also obtaining financial aid from other institutions working in the various districts in which they are situated. Thus credit has been granted to the co-operative land-holding societies by the Savings Banks of Milan, of Reggio Emilia, of Mirandola (Province of Modena), of Piacenza, etc., and by various other institutions, such as popular banks, agricultural banks, etc., as well as by the Credit Institute for Co-operative Societies, of Milan. Latterly it has also been suggested that it might be desirable that the co-operatively organized labourers should themselves assist in providing directly, as far as is possible and where it is possible, the credit required for their own societies. It is pointed out that in Italy many credit institutions carry on a prosperous business on the basis of the deposits of simple labourers and small farmers, and these deposits might, as the result of energetic action on the part of the agricultural labourers' organizations, contribute to the formation of special credit institutions for the agricultural co-operative societies. There are some co-operative societies which, in conformity with this order of ideas, have established a system of deposits and have obtained moderately satisfactory results. But, even admitting that in this manner the provision of credit for these societies might be thus to some degree facilitated, it must be recognized that, however great might be the efforts made by the labourers and the guarantees offered by the organizations with which we are dealing, credit institutions of the kind contemplated would not be in a position to dispose of all the means required by the vast movement for the taking of collective leases and for the acquisition of land by peasant's associations.

Mention must also be made of the Bank of Labour and of Co-operation, formed in 1919 on the initiative of the Catholic credit institutions belonging to the Italian Banking Federation, with the object of placing the advantages of credit and of saving at the disposal of production and of labour. This Bank, in accordance with its programme, grants loans to co-operative societies for the acquisition and division of land.

§ 3. LAND FOR CULTIVATION.

The difficulties which the co-operative land-holding societies encounter in obtaining land to cultivate are by no means inconsiderable. They have obtained it for the most part from private owners. But in recent years letting agreements have frequently been made between public bodies (notably benevolent institutions) which possess land and co-operative societies. As we shall presently see there are now many co-operative societies which cultivate land belonging to public bodies in the provinces

of Ravenna, Bologna, Modena, Reggio, Parma, Piacenza, Mantua, Cremona, Milan and Novara.

The letting of public lands to co-operative societies is regulated by the Decree-Laws of 20 September 1917, No. 1,676, and of 4 August 1918, No. 1,218 (1). The latter Decree, which replaces the former, empowers the provincial and communal administrations and public charitable institutions to let lands belonging to them to co-operative societies by private treaty, subject to the authorization of the prefect. When the administrations decide to adopt the system of letting by public auction, preference must be given to co-operative societies. In the Decree itself rules are laid down regarding the length of the lease (maximum nine years, except in the case of lands capable of reclamation or improvement, in which case a longer lease is allowed) and regarding the security to be given to the body which lets the land (deposit of a half-year's rent to be paid by instalments within three years, whereas ordinarily a year's rent is paid on the signing of the agreement or on taking possession of the land).

These measures favoured in some provinces the agreements between public bodies and the labourer's societies. It must, however, be remarked that the negotiations for the acquisition of land, in particular of land belonging to benevolent institutions, encounter a financial difficulty: while, in fact, the co-operative societies are interested in keeping the rents low, both for their own immediate advantage and to limit the excessive increase in the value of land, which is one of the causes of the high cost of living, the benevolent institutions, on the other hand, have need of obtaining high rents from their lands in order to meet the increase in their expenses which has taken place in recent years. The benevolent institutions sometimes resolve the question by selling their rural property outright. The peasants' associations oppose this tendency, being contrary to the alienation of goods belonging to the benevolent institutions, maintaining that they form a public domain which ought to remain such and not pass into the ownership of private individuals. The solution of this much discussed question, which we can only note in passing, can only be found and in practice often is found in a formula by which the interests of both parties are equitably adjusted, to mutual satisfaction.

Many see in the large estates an important source of land which could be granted to labourers' associations. They are very extensive and their transformation is a national problem of primary importance. It may be noted that the bills for dealing with the large estates which have

(1) The Senate, when ratifying the Decree of 4 August 1918 at its sitting on 19 December 1920, made considerable amendments to it, directed principally to better guaranteeing the public bodies to whom the land belonged, the technical interests of agricultural production and the associated cultivators themselves, both in regard to the technical and financial capacity of the co-operative societies, to the fixing of reasonable rents and to the revision of the rents in the case of agreements for long periods. The bill embodying the Decree is now before the Chamber of Deputies for approval, having been presented at the sitting of 27 January 1921 (*Camera dei Deputati: Atti Parlamentari*, No. 1,189).

recently been laid before Parliament (those introduced by Falcioni, Micheli and Giuffrida) are all based on their subdivision into holdings to be assigned directly or through the medium of co-operative societies to persons who will cultivate them. But as the problem of transforming the system of cultivation of the large estates is very complicated, requiring uniformity of plan and of direction and large resources which are not at the disposal of the small farmer, whether individually or grouped in associations, it is urged by some persons that the State acting through an independent State institution, endowed with the requisite powers and means, should nationalize the large estates and carry out the necessary works of improvement. The execution of these works would be entrusted to the co-operative labour societies, while the cultivation of the land, when improved, would be entrusted to co-operative land-holding societies under letting agreements.

§ 4. ASSISTANCE IN TECHNICAL QUESTIONS AND IN MANAGEMENT.

Another problem of capital importance for the land-holding societies is that of assistance in technical questions and in management. For the scientific cultivation and the management of the land acquired it is indispensable to have the assistance of a technical manager and of a secretary-book-keeper who can make clear the position of the undertaking and enable it to take advantage of farming conditions and of the state of the market. Now co-operative land-holding societies are not always in a position to appoint officers or committees with the necessary technical or administrative capacity, as this involves heavy expenses often out of proportion to their means. Hence the necessity of combining the co-operative societies of each province in groups to provide jointly those technical and administrative services which the associations could not individually provide. Provincial federations of co-operative land-holding societies have been formed with this object at Reggio Emilia, at Bologna, at Milan, at Modena, and at Trapani, while some provincial federations of productive, labour and distributive societies have formed special sections for the co-operative land-holding societies — at Ravenna, Parma, Ferrara, Cremona, Pavia, Mantua, Venice, Bari and Catanzaro. The objects of these federations and sections of federations, which are now everywhere making themselves felt, are: to supply technical assistance to the affiliated societies by means of a qualified staff who, in the case of some of the federations, hold agricultural degrees; to give them assistance in bookkeeping, in some cases the accounts of every affiliated society being kept at the office of the federation; to help them in negotiating for new land and in some cases (Ravenna, Bologna, Reggio Emilia, Cremona, Milan) to take land directly and sub-let it to affiliated co-operative societies without increase of rent or with a very small increase sufficient to cover expenses. The federations also assist the co-operative societies in negotiations for obtaining the necessary advances

from credit institutions, in the purchase of agricultural requisites and in all business transactions.

To give uniformity to the movement, to assist the labourers in the formation of co-operative land-holding societies and in taking land, particularly in districts where there are no organizations for these purposes, to obtain agricultural requisites for the societies on the best possible terms by means of joint purchase, to provide for the insurance of their buildings and produce against the various risks to which they are exposed, there was formed at Bologna the National Federation of Co-operative Landholding Societies (*Federazione Nazionale delle Cooperative Agricole*), to which are affiliated the land-holding societies and their provincial federations (1). It acts through four sections, namely, the Secretariate, which besides co-ordinating the different branches of the federation's work, carries on the work of promoting co-operation and of assisting the societies; the Business Sections, which obtains agricultural requisites for the societies and in 1920 sold goods to the value of about 14,000,000 liras; the Insurance Section, which provides insurance against hail, fire and accidents for the affiliated societies and in 1920, the first year of its working, assured values amounting to 81,000,000 liras; and the Bookkeeping Section, which acts as cashier for the Federation, keeps its accounts, and adjusts the financial relations between the Federation and the co-operative societies which do business with it.

Since in this section we have endeavoured to show how assistance in technical questions and in management is furnished to the landholding societies, we must emphasize the fact that the National Federation has in this matter a definite programme, which it is successfully carrying out. In fact, it invites technicians having the necessary aptitude for managing co-operative societies to come to its offices, where they are trained; they are then sent to the local federations to carry on the work of organization and of assistance. The Federation thus aims at being a school for the training of technicians, well knowing how important is good management for the success of the co-operative societies, especially when they are composed of simple labourers transformed into independent farmers.

§ 5. SOME STATISTICS SHOWING THE PROGRESS OF THE CO-OPERATIVE LAND-HOLDING SOCIETIES.

Having thus indicated some of the principal problems affecting the land-holding societies, we now give some statistics regarding their development.

Emilia. — In this region the movement for the formation of co-operative land-holding societies is steadily progressing.

(1) The societies which belong to this Federation, which, in turn, is affiliated to the National League of Co-operative Societies (Milan) are socialistic in character. The societies organized by the Catholics, on the other hand, are affiliated, through their provincial federations, to the Italian Co-operative Federation (Rome).

In the province of Ravenna the land-holding societies are divided into two groups of different political complexion: the group belonging to the Federation of Co-operative Societies (socialist) and the group belonging to the Independent Consortium (republican).

The results obtained by the socialist movement in the last ten years may be thus summarized: 25 co-operative land-holding societies, 8,077 members, 4,452.16 hectares of land of which the ownership has been acquired, 3,423.39 hectares leased and 179.43 hectares held on the produce-sharing system. In all the societies hold 8,054.98 hectares of land, most of which is directly farmed by the societies, the members sharing in the profits, but part of which is let on a produce-sharing system to the members themselves.

For their part, the republicans have founded the Consortium mentioned; they have also rented land, acquired estates, carried out important improvement works, started a cheese-making industry, etc. The figures for 1920 relating to the republican group are: 29 societies, 20,39.43 hectares of which the ownership has been acquired, 5,670.50 hectares leased. In all 7,709.93 hectares are directly farmed by this group of societies. They possess about 800 horses and cattle, a large number of implements and various machines belonging to the Consortium. The land is cultivated by scientific methods. The cultivation of forage crops (artificial meadows, and lucerne), of cereals (wheat, oats, maize) and of industrial crops (beetroot, tomatoes) are particularly flourishing.

The Consortium regulates all the production by means of its affiliated societies, at the disposal of each of which are placed an agricultural expert and a secretary. These officials work under the direction of the Agricultural Office and the Accountancy Office of the Consortium. The Agricultural Office includes a doctor of agriculture and three experts with agricultural diplomas whose business it is to make inspections, to give instructions and to co-ordinate the work of the experts placed in charge of the various farms by the co-operative societies. The agricultural experts number more than 40. The Accountancy Office includes a chief accountant, three accountants and other bookkeepers.

The Consortium, besides regulating the production, organizes the joint purchase of fertilizers, seeds and implements and the joint sale of the principal kinds of produce, and trains the staff by means of winter courses for the agricultural experts and secretaries.

In the Province of Parma, too, the co-operative movement initiated with the object of "increasing agricultural production, mitigating the evil of unemployment and improving the moral and economic conditions of the peasants" is growing stronger. Some statistics relating to the societies affiliated to the Federation of Co-operative Land-holding Societies (*Federazione delle cooperative agricole*) of Parma are contained in the following table:

Co-operative Land-holding Societies in the Province of Parma.

Societies	Num-ber of mem-bers	Area in "biolche," (= 3081 square metres)	Yearly rent	Value		Machines		Capital			
				Value of live stock	Value of dead stock	and implements	Capital subscribed	Paid up capital	Reserve fund	Miscel- aneous funds	Net capital
Borgo S. Donnino . .	216	180	9,750.00	60,603.02	6,403.81	69,124.04	2,592	2,592.00	64,496.68	1,809.14	68,897.82
Busseto	75	499	42,050.06	240,930.80	44,403.10	99,382.97	15,000	6,717.00	870.74	720.73	8,308.47
Colorno	426	752	49,313.05	240,547.00	61,500.00	61,589.85	11,070	10,551.90	15,713.50	2,272.20	28,537.60
Fontanelle	540	1,177	57,272.72	438,410.00	118,208.00	120,000.00	130,400	121,587.52	15,850.56	8,372.71	145,810.79
Ravadese	30	265	17,523.00	67,770.00	24,330.12	16,241.60	9,850	8,050.00	3,147.89	1,750.43	12,948.32
Sissa	125	345	23,855.64	95,760.00	24,629.98	29,269.46	40,000	39,700.00	2,616.77	10,094.44	52,001.25
Soragna	158	657	32,944.57	380,674.00	48,729.63	129,000.00	50,000	24,686.00	3,469.22	1,825.85	29,961.10
Total	1,570	3,875 (1)	232,709.94	1,521,694.82	328,204.64	524,607.92	255,912	213,884.42	106,165.36	26,845.53	346,485.35

(1) Equal to 1,193,888 hectares.

Notwithstanding the losses caused by foot-and-mouth disease, the aggregate value of the live stock, as may be seen from the table, reached the sum of 1,524,694 liras; the returns from stockbreeding, including the value of the milk sold and the gross profits on the live stock, amounted to 358,883 liras in 1918 and to 521,858 liras in 1919. This shows the importance which is attached to this branch of farming; in fact about one third of the land is devoted to permanent or temporary pasture. The cultivation of wheat and maize, which yielded an abundant crop in 1919, comes next in importance. An average yield per hectare of 17.49 quintals of wheat and 31.29 quintals of maize was obtained in 1919 as compared with yields of 16 and 21 quintals respectively in 1918. It is worth noting that agricultural machines are largely used, their total value reaching 524,607 liras.

The position in 1920 shows a further increase. The figures relating to the nine societies affiliated to the Federation were in fact as follows: Area of land cultivated, 2,776.289 hectares; yearly rent, 607,813 liras; number of members, 1,574; subscribed capital, 671,491 liras; owned capital 500,956 liras; value of live stock, 3,516,063 liras; machines and implements 1,089,994 liras; other dead stock, 573,397 liras; value of real property belonging to the societies, land, 3,179,150 liras and buildings, 55,580 liras. The greatest increases were in the subscribed capital, in the owned capital, in the value of the live stock and in that of the machines and implements. The returns amounted to 4,913,391 liras, including produce sold 3,019,867 liras; gross profit on live stock (not including milk sold) 996,077 liras and other items, 897,446 liras. The expenses amounted to 4,895,885 liras, including wages, 2,519,883; chemical fertilizers, 218,766 liras; seeds, sulphur, sulphate of copper and other expenses of cultivation, 883,126 liras, and general expenses, 1,274,010 liras.

In the province of Reggio Emilia, the co-operative movement is under the guidance of the provincial federation, which, besides actively assisting the federated societies, itself takes land to cultivate it either directly or in conjunction with other co-operative societies. The total area of land held in ownership or on lease by the 14 co-operative societies in the province and cultivated by them amounted in 1920 to 1,527 hectares. This province is one of the best organized in Italy.

In the Province of Bologna, too, there is a central organization, the Provincial Consortium of Co-operative Land holding Societies (*Consorzio provinciale delle cooperative agricole*), with 51 affiliated societies in 1920 cultivating 3,489 hectares of land. In that year the Consortium made agreements for renting 206 holdings (2,612 hectares) at an aggregate rent of 1,113,570 liras, assisted the affiliated societies to obtain loans amounting to 6,470,000 liras, and made joint purchases of agricultural requisites and other goods to the value of 6,542,700 liras.

In the Province of Modena there are 35 societies, partly with separate management and partly with joint management; at the beginning of 1921 nine of these societies cultivated 1,770 hectares (1,260 hectares rented and 510 hectares owned).

This form of co-operation is also spreading in the Provinces of Ferrara, Piacenza and Forlì.

Lombardy. — The co-operative landholding movement has made remarkable progress in this region, particularly in the Provinces of Milan, Bergamo, Pavia, Cremona and Mantua. In November 1920 there were 16 societies with separate management and 11 societies with joint management in the Province of Milan, the total area occupied being about 4,500 hectares. These societies were affiliated to the Interprovincial Agricultural Federation.

In the Province of Cremona, in April 1920, 11 societies affiliated to the Provincial Federation held on lease a total of about 972 hectares.

The co-operative land-holding movement has lately developed in a striking manner in the Province of Mantua, where on 31 December 1920 there were 20 societies cultivating about 2,300 hectares which they rented or occupied under a produce-sharing tenancy.

Co-operative landholding societies have begun to be formed in the Province of Brescia.

Venetia. — The societies which cultivate land, whether under joint or separate management, are working satisfactorily in the Provinces of Rovigo, of Venice (940 hectares held in ownership), and of Verona (1,560 hectares rented).

Piedmont. — In this region, too, some land-holding societies have recently been formed. To those in the Provinces of Novara and of Vercelli, of which we have previously spoken, were added those of the Province of Alessandria where the labourers on the one hand and the small farmers on the other have formed promising societies.

• *Tuscany.* — Co-operative landholding societies are only to be found in the Province of Grosseto, where in July 1920 they cultivated 180 hectares of rented land.

Sicily. — The co-operative land-holding societies in Sicily arose out of the defence associations (*leghe di resistenza*) and were formed both by socialists and by Catholics (1). To-day they number more than 100, counting only those which are actually working and not those recently formed by ex-service men. In the Province of Caltanissetta there are 25, which cultivate about 20,000 hectares of land, and in the Province of Trapani there are 12.

The number of members is always considerable, varying from 200 to 3,000 for each society. The capital is generally small, which depends principally on the fact that many of the societies have taken the form of societies with unlimited liability and so can obtain credit in proportion to the capital possessed by the members. There are, however, some societies, particularly those which were formed a considerable time ago, with

(1) On the origin of the land-holding societies in Sicily, see Vol. VI (Part. IV, Chapter V) of the "Inchiesta parlamentare sulle condizioni dei contadini nelle provincie meridionali e nella Sicilia. Relazione del delegato tecnico, prof. Giovanni IORRIZONI," Rome, 1900 and 1910.

a comparatively large capital, such, for example, as that of Marsala, with more than 116,000 liras of capital (paid-up share capital and reserve fund) ; that of Monte S. Giuliano, with 111,000 liras of capital ; that of Paceco, 65,000 liras ; that of Villarosa, 57,000 liras, etc. The management is usually in the hands of capable persons. The leases are generally for periods of 6 years, but are sometimes for 9, 12 or more years. The lands held, which always belong to private owners, are in general of considerable extent ; the Co-operative Land-holding Society of Marsala cultivates 2,200 hectares ; the People's Co-operative League of Marsala, 1,960 hectares ; the Co-operative Society of Monte S. Giuliano, 1,300 hectares ; the Co-operative Society of Paceco, 1,370 hectares ; the Co-operative Society of Valguarnera, 1,043 hectares ; the Co-operative Society of Villarosa, 1,800 hectares ; the Co-operative Society of Terranova, 1,350 hectares.

The lands now rented by the co-operative societies were always previously cultivated on a produce-sharing system in which the landowner received two-thirds of the produce (*terzeria*) ; the societies, having done away with the produce-sharing system, have cultivated the land on a two course rotation of beans and wheat or other leguminous plants and cereals. The general production appreciably increased. The area cultivated by each member varies from 1 to 5 hectares. The peasants live on the land if there are houses for them or if straw-cabins are built for them ; otherwise they live in the villages. Unquestionably the peasant who belongs to a co-operative society gains more than a peasant of the same class who does not belong to a society. He has been able, by becoming a member of the society, to acquire land without the intervention of the *gabellotto* and in obtaining agricultural requisites to eliminate the various middlemen. The co-operative societies, thanks to the abolition of the produce-sharing system, on account of which half of the land remained unproductive, and by bringing under cultivation all the land rented, have rendered considerable service to the community at large ; although there are no precise statistics it may be estimated that about 100,000 hectares of land have been brought under cultivation in Sicily by the co-operative land-holding societies.

To sum up : From the foregoing statistics and from others which for the sake of brevity we omit, it appears that the co-operative land-holding societies, though meeting with serious difficulties both technical and financial, have already made good in many different parts of Italy. It may be said that the experimental period has been passed through and that the societies are increasing in number and strength and, thanks also to the recent credit facilities accorded to them in an organized form by the State, are in a fair way to becoming an important factor in the national economy, while by ensuring the peaceful transfer of the ownership of the land to those who directly cultivate it, as they have long and keenly desired, they are removing the possibility of conflicts which might be prejudicial to agricultural production.

Part II: Insurance and Thrift

MISCELLANEOUS INFORMATION RELATING TO INSURANCE AND THRIFT.

FRANCE.

THE LARGE MUTUAL LIVE STOCK INSURANCE COMPANIES IN 1920 — *L'Argus*.
Paris, 28 August 1921.

Owing to the increase in the value of live stock, the large mutual live stock insurance companies have done a considerable business in 1920, of which the *Argus* gives the following summary :

Business done by the Mutual Insurance Companies.

Names of the companies	Headquarters	Number of policy- holders	Value assured fr.	Receipts fr.	Losses		Reserve funds at the end of the year
					Num- ber	Amount fr.	
Avenir	Paris	12,300	61,959,867	1,830,537	943	1,514,760	527,871
Bétail	Paris	366	363,612	11,745	8	3,922	2,947
Bon Laboureur	Dieux	3,701	21,334,183	779,300	318	545,321	78,864
Cultivateurs réunis . .	Nantes	2,325	2,891,988	61,544	103	39,815	9,812
Fédération des agricul- teurs français	Paris	5,450	21,766,125	1,033,855	335	497,854	44,780
Fédération Nationale . .	Paris	3,032	12,051,014	775,338	231	309,840	—
Garantie Fédérale . . .	Paris	6,473	30,560,800	1,280,795	680	681,768	139,976
Mutuelle Régionale Agri- cole	Chartres	10,958	63,617,340	1,868,312	662	1,138,281	495,000
Maternelle	Deux	500	3,031,180	109,132	61	109,132	15,130
Mutuelle Percheronne . .	Nogent-le-Rotrou	14,874	50,338,510	1,179,654	549	512,646	400,000
Prévoyante	Souppes	933	2,500,000	80,000	46	70,010	29,826
Union Fédérale de France	Paris	12,270	41,428,163	1,152,104	718	583,770	1,465,864
Almeo	Almeo (Holland)	7,273	30,237,629	1,202,331	571	754,482	518,984
Total . . .		70,255	343,073,723	11,368,617	5,240	6,856,611	3,738,654

HOLLAND

THE INSURANCE OF FARM LABOURERS AGAINST ACCIDENTS BY THE "LAND-BOUW-ONDERLINGE". VERKENNING "DE CENTRALE LANDBOUW ONDERLINGE." VERSLAG, BALANS EN REKENING EN VERANTWOORDINGEN OVER DE BOEKJAAREN 1919 EN '20 (*Central Mutual Agricultural Society, Report and Balance Sheet, 1919 and 1920*).

In an article published in our issue of March 1914 the origin of the *Centrale Landbouw-Onderlinge* and its early work were explained.

It was then stated that the larger Dutch agricultural associations, considering that the system pursued by the government from the year 1901 for the insurance of industrial workers did not meet the necessities of farm labourers, set to work to form an institution free from State intervention.

The *Centrale Landbouw-Onderlinge* has done excellent work for ten years, thus proving that an insurance company absolutely decentralized, and depending chiefly on the unpaid collaboration of its supporters, can well meet all the exigencies of this important branch of insurance (1).

From the report of this mutual society for 1919 it appears that the number of its members rose from 3,699 in 1910 to 15,000 in 1919, that 21,845 workers had received compensation and that 95 widows or other members of families had been liberally assisted, and this at the moderate cost of 12 ½ florins per 1000 florins of wages. Although private initiative has produced these results, the management would be glad to see a law to compel those agriculturists who have hitherto kept aloof to insure their own workmen, and they have full faith that the Government, seeing the good results of private insurance would allow the greatest possible liberty to the existing societies.

We shall now give some figures referring to the work of 1920. A comparison with the particulars given in the article above mentioned will show the progress made by the Society. It may be said that in general the private insurance carried on by the *Landbouw-Onderlinge*, owing more especially to the active propaganda for the application of preventive measures and for increasing the skill of the men in charge of machinery, has succeeded in reducing considerably the cost of working. In examining the following tables it must be remembered that even in Holland money has lost much of its value.

Table I shows the number of sections, the number of members per province and the amounts insured. The slight diminution in the number of members is easily explained by the imminence of the new law to which reference has already been made

(1) We may remind the reader that the Central Society combines the independent provincial associations which themselves settle all small claims. These associations, in their turn, are divided into local Sections. The Central Society acts as the common administrative centre and provides the compensation in the most serious cases.

TABLE I. — *Sections, Members, Sums Insured.*

Provinces	Number of sections	Number of members			Total on 31 December 1920	Sum, insured for 1920
		On 31 December 1919	Resigned in 1920	Admitted in 1920		
						florins
Friesland	32	3,090	234	150	3,012	9,154,354
Zealand	22	1,172	73	62	1,161	6,116,908
South Holland	30	1,875	150	72	1,788	5,121,525
North Holland	42	2,822	152	131	2,801	6,567,734
Groningen	27	1,252	78	62	1,240	6,605,348
Overijssel	15	611	11	42	600	1,191,076
Utrecht	12	419	13	25	401	832,700
Drenthe	38	2,403	133	91	2,361	2,007,194
Brabant	4	312	18	11	316	1,010,060
Guelderland	20	1,021	45	46	1,022	1,830,035
Individual members of the Central Society	—	2	—	—	2	1,864,701
Total	251	15,010	979	606	14,729	11,502,704

Table II (page 507) gives the causes and physical consequences of the accidents and the compensation paid.

Table III (page 508) shows the number of accidents per province and their financial consequences.

Table IV (page 508) shows that the total expenses per 100 florins of wages is steadily diminishing.

TABLE III. — *Accidents and their Financial Consequences in 1920.*

Provinces	Accidents uncom- pensated with work	Not compen- sated	Medical care only	Tempor- ary compen- sation	Temporary com- pensation for more than 2 months	Compensation for life	Fatal accidents with compensation without compensation		Total
Friesland	8	17	54	405	20 ⁽¹⁾	2	2	1	611
Zealand	4	24	63	392	11 ⁽¹⁾	5	—	—	499
South Holland	7	19	18	271	15 ⁽¹⁾	1	—	—	331
North Holland	1	33	33	301	32 ⁽¹⁾	1	2	—	403
Groningen	2	37	11	200	10	—	—	—	299
Overijssel	—	7	4	18	1	1	—	—	64
Utrecht	—	5	7	52	6	—	1	—	71
Drenthe	1	22	16	151	5	1	1	—	197
Brabant	—	23	15	91	1	—	1	—	134
Guelderland	—	7	25	133	9	—	1	—	175
Individual mem- bers of the Cen- tral Society	4	1	10	93	1	—	—	—	112
Total	27	225	261	2,200	120	11	8	1	2,896

(1) Of which one case only required medical attention after two months.

TABLE IV. — *Total Expenses per 100 Florins of Wages.*

Provinces	Expenses per 100 florins of wages		
	1910-1914	1915-1919	
	Average florins	Average florins	florins
Friesland	1.08	1.16	0.97
Zealand	1.10	1.19	0.99
South Holland	1.17	1.30	0.99
North Holland	1.11	1.27	1.04
Groningen	1.02	1.01	0.80
Overijssel	1.28	1.21	0.92
Utrecht	1.22	1.31	1.22
Drenthe	1.15	1.17	0.94
Brabant	1.05	1.22	0.93
Guelderland	1.22	1.26	1.04
Individual members of the Central Society	0.97	0.98	0.79
Average	1.125	1.19	0.95

Lastly, we give some general figures taken from the balance sheet of 1920.

The total amount of the temporary compensation and of the expense of medical attendance after the second month including a reserve fund for further probable expenses was 28,600.67 florins

The total net amount of available liquid assets reserved for compensation payable for life or in a single sum including the reserve for cases still undetermined was 104,264.12 »

The general total amount of compensation for accidents borne by the Central Society was . . . 132,864.79 »

The other expenses were :

For appeal to arbitration commissions . . . 685,37 »

Management and other expenses 124,994.17 »

Deducting th. interest on capital 125,679 55 florins
22,661.84 »

There remain . . . 103,017.71 florins

The total expenses of the Central Society amounted to 235,961.37 »

But since in 1919 the members paid 788,95 florins more than required by the balance sheet of 31 December 1919, the contributions for 1920 amounted only to 235,172.42 florins.

The wages paid by the members may be calculated at 44,502,704 florins; hence the contributions may be valued at 0.53 florins per 100 florins of wages. During the years from 1910 to 1919, these figures were respectively 0.63; 0.53; 0.66; 0.79; 0.86; 0.70; 0.59; 0.61; 0.91; 0.84. The year 1921 was thus among the most favourable.

Besides providing for the expense of working the Central, the members contribute to the provincial associations. The total amount of these contributions per 100 florins of wages may be deduced from Table IV.

The total reserve of the Central on 31 December 1920 amounted to 727,824.87 florins of which 701,337.37 had been devoted to the purchase of land.

Part III: Credit

PARAGUAY.

THE AGRICULTURAL BANK OF PARAGUAY

SOURCES (OFFICIAL):

- EL BANCO AGRÍCOLA DEL PARAGUAY. SU ORGANIZACIÓN Y SU OBRA. Report supplied by Agricultural Bank of Paraguay to the International Institute of Agriculture.
- LEY ORGÁNICA DEL BANCO AGRÍCOLA DEL PARAGUAY, 20 NOVIEMBRE 1915. Asunción, 1916.
- MEMORIA DEL BANCO AGRÍCOLA DEL PARAGUAY CORRESPONDIENTE A LOS EJERCICIOS DE 1915 Y 1916. Asunción, 1917.
- MEMORIA DEL BANCO AGRÍCOLA DEL PARAGUAY CORRESPONDIENTE A LOS EJERCICIOS DE 1917 Y 1918. Asunción, 1920.
- MENSAJE DEL PRESIDENTE DE LA REPÚBLICA DEL PARAGUAY, DR. JOSÉ P. MONTERO, ABRIL DE 1920. Asunción, 1920.

In our issue of June-July, we discussed the agricultural economic conditions of Paraguay and gave particulars of the laws made in order to further colonization and to promote the agricultural development of the country. To complete these laws and, in particular, to foster and to facilitate the cultivation of the land, the Government of Paraguay has provided a well-organized system of credit in favour of the settlers and of agriculture in general carried out by means of a special organization, namely the Agricultural Bank, of which we here give a brief account.

§ 1. FUNDAMENTAL LAW AND AMENDMENTS.

The Agricultural Bank of Paraguay, founded by the Law of 2 September 1887 in order to protect and to promote agriculture, has its head office at Asunción and various branches and agencies in the principal agricultural centres of the Republic.

The fundamental law assigned to the Bank a nominal capital of 3,000,0000 pesos (paper), legal currency, which was to have been supplemented by special additional duties on the export of maté, tobacco, hides and wood.

The principal duties which were assigned to the Bank by the fundamental law were as follows:

(a) To carry on all kinds of banking business with farmers and manufacturers and, in particular, to open current accounts adequately guaranteed, to accept bills of exchange, to buy and sell drafts, to advance

money against deposited securities, to open credits in foreign countries for the purchase of seeds, agricultural implements, pedigree stock, etc.

(b) To make loans to farmers and manufacturers on the security of pledges, mortgages and sureties.

(c) To promote meetings between farmers and stock-breeders and manufacturers in order to induce them to increase and to better their work, their produce, etc.

Two thirds of the Bank's total capital were to be used for making agricultural loans and one third for making industrial loans.

For five years the Agricultural Bank carried on under the provisions of the fundamental law the work assigned to it, but the scarcity of capital, which was only forthcoming to a small amount, did not permit of useful work being done in the interests of agriculture, so much so that the necessity was felt of reorganizing the Bank in order to put it in a position to fulfil the purpose for which it was established.

This was provided for by the Law of 30 June 1892 which entrusted to the Agricultural Bank the liquidation of the old National Bank and assigned the bills discounted by the Colonization and Works of Public Utility Department, as well as the proceeds of the sale of the copper money of the National Bank to increase the capital of the new Bank.

As thus reorganized, the Agricultural Bank ceased to be a simple institution giving direct agricultural credit and gradually extended its scope, undertaking other operations for the encouragement of agriculture.

These new activities commenced with the encouragement of production, the promotion of the working up of agricultural and natural products, and the provision of facilities for placing them on European markets.

The staff having been reorganized under a further law, dated 6 October 1894, the Bank, continuing its work in aid of agriculture, aimed at intensifying production for export and, in particular, developed a liberal system of credit for those industries which are derived from agriculture, such as cane sugar, vegetable oils, and soaps made from ground-nut and cocoanut. It made experiments and awarded prizes for the machines best adapted for these industries.

To assist the Bank in this particular work there was formed by a Decree dated 27 December 1895 a *Mercado de Frutos del País*, an office under the control of the Bank for receiving on deposit from owners, consignees or agents the agricultural and natural products of the country against payment of a moderate storage fee. These products were to be kept, with proper precautions, in special warehouses to which free access was to be allowed to all those interested in buying and selling them.

But the work of the Bank was specially directed to fostering the cultivation and manufacture of tobacco (which, as is well known, is the most important product of Paraguay) by improving the cultivation and perfecting the treatment. To this end the *Mercado de Frutos del País* was reorganized and enlarged by the Law of 19 October 1898 and today

works under the name of *Oficina Revisadora de Tabacos y Mercado de Frutos* ; it is one of the best institutions under the control of the Bank.

This department exercises official supervision over all tobacco which is exported from Paraguay and gives the special certificate upon which the exemption from export duty allowed to tobacco is granted.

The certificate of inspection affords a guarantee which is accepted and required today on the European markets. The guarantee certifies that the tobacco has been duly graded, has been properly prepared and is in a good state of preservation.

This inspection department works under the direction of the Management Committee of the Agricultural Bank and of Supervising Committee appointed by the Government.

With the object of intensifying the production and substituting more modern methods for the traditional methods of cultivating and treating tobacco, the Agricultural Bank has erected large model drying sheds in each of the departments in which tobacco is grown.

§ 2. REORGANIZATION OF THE AGRICULTURAL BANK.

The first twenty years of the working of the Agricultural Bank showed that direct credit in money which was the principal method by which encouragement was given to the cultivators, did not adequately meet the special conditions of the country and that, in like manner, mortgage credit was not sufficient to enable the objects which the Agricultural Bank proposed to itself in the general interest of agriculture to be attained.

From 1910 onwards the question was again discussed as to what other methods could be adopted for aiding and fostering agriculture and as a result the Bank was completely reorganized under a Law dated 19 November 1915.

The fundamental idea which underlay the new law was that of assisting directly in increasing and improving production by means of special organizations, of making known the produce of the country and opening up markets for it, even, when necessary, by means of the direct intervention of the State. On the other hand it was considered necessary to introduce a new form of credit more readily accessible to the farmers and better adapted to the conditions of the country, and this form was found in the use of agricultural warrants.

Thus according to the new law, which is still in force, the operations of the Bank may be enumerated as follows :

(a) To grant cash loans to farmers, stock-breeders and manufacturers :

(b) To provide facilities to the same classes of persons for the purchase of machines, implements and seeds.

(c) Directly to make experiments in the cultivation of certain crops or in the carrying on of certain industries ;

(d) To diffuse a knowledge of the best systems of exploiting the land and the natural resources of the country ;

- (e) To buy and to sell the produce of the country ;
- (f) To open up markets and facilitate the marketing of produce ;
- (g) To encourage the erection of factories and workshops and the breeding of improved stock ;
- (h) To promote the establishment of transport undertakings and the improvement of the means of communication ;
- (i) To encourage the formation of agricultural co-operative societies, industrial co-operative societies, co-operative productive societies, co-operative societies for the sale of produce and co-operative credit societies (known as rural banks).
- (j) To assist in the formation of "homesteads," giving to farmers the loans necessary for the acquisition of cultivable land not exceeding 20 hectares in area ;
- (k) Lastly, to adopt any means which in the opinion of the Management Committee might seem to be adapted to attaining the objects aimed at by the Bank.

§ 5. THE SYSTEM OF LOANS.

The loans which may be granted by the Bank are of three kinds — mortgage loans, loans secured by pledges, and loans guaranteed by sureties. In the case of loans secured by pledges the Bank can insist upon sureties as a collateral security.

The Committee must not grant loans exceeding 250,000 pesos to any one person or company.

The period for which a loan is granted, whatever may be its nature, must not exceed ten years and the rate of interest, which is fixed by the Committee, must not be less than 6 per cent nor more than 10 per cent. The method of repayment will be determined in each case, taking account of the way in which the money lent is invested or the purpose to which it is applied. Loans of a larger amount than 25,000 pesos cannot be granted except on the security of a mortgage.

The law by which the Bank was reorganized then lays down various rules according to the purposes for which loans are granted.

Loans for building purposes, whatever may be their amount, can only be granted on the security of a mortgage and they must not exceed 50,000 pesos legal currency to any one person or company. These loans are granted by a special department of the Bank called the Mortgage Department.

As to loans for the formation of "homesteads," the law provides that only one such loan can be granted to any one person or head of a family, and lays down special rules for such loans. It states in fact that the borrower must give a mortgage on the land which is transferred to him and that he must devote himself to that branch of agricultural work which has been agreed upon with the Bank, under penalty of being dispossessed without any compensation. He cannot transfer the land nor in any way compromise his property rights in it without the consent of the Committee for a period of ten years and in any case, if the land is transferred, the per-

son to whom it is transferred will be subject to the same obligations as the original owner. The land cannot be used as security for any obligations other than those connected with the formation of the "homestead" nor can it be sub-let without the consent of the Bank.

Other provisions of the Law relate to the loans according to their nature.

Personal guarantees must be in the form of a bill, and the surety and borrower are jointly and severally liable. The liability of the surety continues for the whole duration of the loan and no protest or notice to pay is required. It is not necessary to renew the guarantee at the dates fixed for the instalments of repayment it being understood that the debt will be cancelled at the end of the period by means of the receipts given by the Bank or its agents for the partial repayments.

As to loans on the security of pledge, the law lays down that the Bank may leave the articles pledged in the possession of the borrower, who will be subject to the same liability, civil and penal, as a person who accepts a deposit in the ordinary way.

With regard to mortgage loans, it is laid down that the security must fulfil the following conditions: (1) The mortgage must be a first mortgage; (2) the property mortgaged must not be burdened with any other charge which would diminish its value nor be let for a period exceeding three years; (3) the ownership of the property must not be legally contested.

Mortgage loans must not exceed 70 per cent. of the value of the property mortgaged, and loans on the security of a pledge must not exceed 50 per cent. of the value of the articles pledged, the value being fixed in each case by the Bank itself.

Other rules relate to the procedure to be followed in cases where the borrowers fail to carry out their obligations. If within thirty days from the due date, the borrower fails to pay the instalment of repayment and interest, he becomes liable to penalties and the interest is increased as long as the arrears remain unpaid by 1 per cent. per annum.

When sixty days have elapsed from the time when the borrower becomes liable to penalties, the payment can no longer be made by instalments and the debtor will be obliged to repay the whole amount of the loan together with interest due.

In the case of loans not exceeding 500 pesos, the Bank can proceed, without the intervention of the courts, to the sale by public auction of the land mortgaged or of the articles pledged.

In the case of loans on the security of a mortgage or a pledge which are more than 500 pesos in amount, but do not exceed 5,000 pesos, as well as in the case of loans guaranteed by sureties, the intervention of the courts is limited to ascertaining that the payments are in arrears and ordering the sequestration of the property mortgaged or the articles pledged.

Amongst the other general provisions regarding loans, may be noted that whereby purchasers of property which serves as a guarantee in favour of the Bank may with the consent of the Bank, assume the rights

and obligations of the debtor. In cases where several articles or lands serve as guarantee for the loan, the partial liberation of such articles or lands may be allowed in proportion to the repayments made, provided always that the Bank makes no objection to this being done.

The Bank may also insist that the borrowers shall insure the property serving as guarantee and, in case of accident, the insurance goes in the first instance towards the repayment of the debt.

§ 4. WARRANTS AND AGRICULTURAL PLEDGES.

As we have noted, the Law under consideration includes among the innovations made by it the introduction of "warrants," a form of credit which is connected with the working of the market for produce administered by the Agricultural Bank.

The Law authorizes the Bank to receive on deposit in the warehouses of the market such kinds of agricultural produce as may be fixed by the Council of Agriculture and Industry, which may limit the right of deposit to direct producers, to the exclusion of middlemen.

The produce deposited in the warehouses of the market cannot be detained upon as long as it remains in the warehouses. The Agricultural Bank must deliver a deposit certificate and, at the request of the depositor, may also issue a duplicate of the certificate, which will be called an "agricultural warrant."

These documents may be negotiated and transferred to third parties by a simple endorsement. The certificate and the "agricultural warrant" (if one were issued), when both are in possession of the depositor or of the party to whom they have been transferred, give the right to dispose of the produce to which they refer. The "agricultural warrant" without the certificate gives only a right of pledge over the produce.

Any person acquiring a certificate or an agricultural warrant has the right to inspect the produce to which it refers and the expenses of so doing will fall upon the depositor.

As has been said, the certificate and the warrant can be transferred by means of an endorsement. With regard to this, the Law lays down that note of the first endorsement must be taken with a brief statement of the particulars, in the books of the *Mercado de frutos*, without which the transfer will not be valid. The first transfer of the certificate or of the warrant must be written in full on the back of the document itself. Subsequent transfers, the registration of which is not compulsory, can be made by simple signature after the first.

The Law authorizes the Bank to accept warrants as an agricultural pledge and to grant loans upon them to an amount not exceeding 50 per cent. of the value of the produce deposited. Such loans will be subject to the same privileges enjoyed by other loans made by the Bank and must only be granted to agricultural producers.

The produce deposited will not be handed over unless the certificate and the warrant are presented together in the event that they have not

been transferred. Where the transference of the warrant has been registered, this must be presented together with proof that the debt on account of which it was transferred has been cancelled. Such proof may also be furnished by means of a separate document.

The holder of the certificate apart from the warrant may repay before the due date the loan in respect of which the warrant was transferred. If the holder of the warrant is unknown, or makes difficulties in regard to repayment in advance, the holder of the certificate may hand to the Bank the amount of the debt and withdraw the produce in store on presenting an order from the Bank and paying the fees due. The creditor holding the warrant will have the right to receive the sum deposited in the Bank as soon as repayment becomes due.

On the other hand, when repayment of the debt in respect of which the warrant is the guarantee is not made on the due date, the creditor can request that the produce to which the warrant refers shall be sold by public auction. On receiving such a request the manager of the *Mercado de frutos* must call upon the debtor to repay his debt within a period of 25 days and, if that is not done within the time specified, he must order the sale by auction of the produce. The sale so ordered will not be suspended on account of the bankruptcy nor of the death of the debtor nor for any other reason except the payment of the amount due together with the interest and the expenses incurred.

§ 5. STATISTICS OF THE WORKING OF THE BANK IN THE YEARS 1915 TO 1919.

Having thus examined the various branches of the work of the Agricultural Bank of Paraguay, we now give some statistics concerning the principal operations carried on in the years 1915 to 1919.

It must first be stated that the capital of the Bank from its foundation to 1920 has undergone the changes shown in the following table :

Capital of the Bank from its Reorganization up to 1920.

	PESES
1892. — Effective capital at the date of the reorganization	545,423.48
Bills discounted by the Colonization Department of the National Bank	1,454,576.52
Successive increases 1895, 1896 and 1897	2,125,500.00
Total 1897	4,125,500.00
1897. — Deducting the sums not realized up to 1903 the actual capital was	2,781,822.77
Increase of capital under the Law of 14 July 1903	11,178,177.23

1903. -- Capital of the Bank from 1903 to	—
1915	14,500,000.00
Increase of capital in 1915	20,000,000.00
1915. — Capital of the Bank from 1915	—
to 1920	34,500,000.00

Article 41 of the Law of 29 November 1915, which we have outlined, fixes the capital of the Bank at 50,000,000 pesos, legal currency, providing that the profits of the Bank shall be utilized to make up the difference between this sum and the then capital of the Bank.

The following table shows the loans made in the years 1915 to 1918, particulars not being available for the year 1919.

Loans Made

Year	Loan on pledges		Loans guaranteed by sureties		Mortgage loans	
	Gold	pesos	Loans	pesos	Gold	pesos
1915 . . .	—	135,708	—	2,300,427.30	—	2,869,634
1916 . .	—	2,891,118.30	—	4,796,451.00	—	1,135,000
1917	—	101,780	—	4,538,061.45	—	2,108,362
1918 . . .	—	50,500	1,127.23	2,160,103.08	—	265,300

From the above figures it will be seen that in the year 1916 the amount of the loans made was larger by the considerable sum of 2,544,400.06 pesos than in the previous year. This increase, as the Report of the Bank states, was due to a greater liberality on the part of the Bank in granting loans in favour of agricultural undertakings, which had been seriously damaged by locusts and by drought. A more liberal distribution of provisions of credit for the farmers had been rendered necessary. It was thus possible repeatedly to make new sowings and, thanks to the money loans specially granted to the farmers who had suffered, the danger of an agricultural crisis which might have had a serious effect on the general economy of the country was averted.

An appreciable diminution, on the other hand, is noticeable in the loans granted in the year 1917 and 1918, this diminution being due to a stricter limitation of the discounts adopted by the Bank, principally with a view to meeting the delays in repayment on the part of debtors who had suffered through bad harvest.

The receipts of the Bank from repayments of loans and as interest in the years under review were as follows :

Year	Repayments		Interest	
	Gold	pesos	Gold	pesos
1915	—	1,646,621.32	—	1,063,567.15
1916	—	4,913,225.32	—	1,301,442.50
1917	2,346.18	3,588,492.44	—	1,103,128.04
1918	1,244.65	4,485,034.71	—	1,122,397.81
1919	797.00	2,474,547.63	—	877,273.61

MISCELLANEOUS INFORMATION RELATING TO CREDIT

ITALY

- 1 THE CREDIT CONSORTIUM FOR PUBLIC WORKS. - LEGGE 14 APRILE 1921, N. 488, CHE CONVERTE IN LEGGE IL REGIO DECRETO 2 SETTEMBRE 1919, N. 1627, RELATIVO ALLA COSTITUZIONE DI UN NUOVO ENTE DENOMINATO "CONSORZIO DI CREDITO PER LE OPERE PUBBLICHE".

To facilitate the revival of the productive activity of the country a Credit Consortium for Public Works (*Consorzio di credito per le opere pubbliche*) was founded in Rome by the Decree of 2 September 1919, No. 1,627, converted into a law by the Law of 14 April 1921, No. 488. The principle on which the Consortium was based had been put forward by the After-War Commission (1).

The Consortium is composed of the Deposit and Loan Bank, the National Insurance Institute, the National Social Insurance Fund, the National Credit Institute for Co-operation, and such savings banks as may make application to become members.

In spite of the serious difficulties of the moment, the Consortium succeeded in carrying on a large and beneficent work. Its Committee of Management approved loans to the amount of about 170,000,000 liras; those already granted amount to about 70,000,000 liras. All the loans granted were for works of reclamation and irrigation.

(1) The Commission which was instructed to study and propose provisions for the transition from a state of war to a state of peace was appointed by the Lieutenantcy Decree of 21 March 1918, No. 361. See the Report of the President of the Economic Sub-committee (the Hon. Rinaldo Pantano), published in 1919.

The Consortium aims above all at facilitating the execution of works which contribute directly to the increase of production, more especially of cereal-growing. A work of immense scope is being undertaken, the financing of the reclamation works in Venetia, the cost of which will be 300,000,000 liras. When these works have been carried out the area devoted to cereal-growing will be increased by more than 200,000 hectares. To be able to dispose of such large sums, the Consortium endeavours to take advantage also of private savings, especially in the districts where the works are carried out. It issues, as required, like the land credit institutions and on equally substantial security, bonds corresponding to the loans granted; these are negotiable on the stock exchange and are included amongst the securities on which the banks of issue may grant loans. They were well received on the market and have been subscribed for to the extent of about 70,000,000 liras.

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2. THE FIRST WORKING YEAR OF THE FEDERAL CREDIT INSTITUTE FOR THE REVIVAL OF THE VENETIAS RILAZIONE DEL CONSIGLIO DI AMMINISTRAZIONE
SUL 1° ESERCIZIO, Venice, 1931

The Federal Credit Institute for the Revival of the Venetias (*Istituto federale di credito per il risorciamento delle Venezie*), was established by the Decree of 24 March 1919, No. 497, for the purpose of contributing to a more rapid recovery from the damage caused by the war, either by granting advances on the compensation in course of assessment or of settlement by the State, or by making loans or subsidies, even in the forms laid down by the laws on agricultural credit, to public bodies, private undertakings or individuals, for carrying out reconstruction works or for bringing land under cultivation.

The Institute started with a capital of 23,460,000 liras which on 31 December 1920 had risen to 26,000,000 liras. The sums assigned to it by the State amounted to 1,010,000,000 liras, of which 818,500,000 liras had already been received and had been thus employed: in advances to persons who has suffered damage in the war, 698,000,000 liras; in financing provincial stock-breeding consortia, 90,500,000 liras; as a contribution to the capital of the National Credit Institute for co-operation, 30,000,000 liras.

The Institute further decided to start a competition for the reconstruction of farms, industrial undertakings and dwelling houses and set aside 220,000 liras for 64 prizes; it took part in financing improvement works; it shared to the extent of 500,000 liras in the formation of the Society (*Ente*) for the Reconstruction and Agricultural Revival of the Provinces of Treviso and Venice; it granted 250,000 liras towards an Institute of Mountain Economy in Tolmezzo and 450,000 liras to the Friuli Credit Institute for Service Men and for the Reclamation of the Marshes.

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1. THE AGRICULTURAL CREDIT BANK OF FLORENCE. — BANCA DI CREDITO AGRICOLO
DI FIRENZE: RIFLAZIONE DEL CONSIGLIO DI AMMINISTRAZIONE E DEI SINDACI SULL'ESERCIZIO 1920. Florence, 1921

Up to 1913 there was no special agricultural bank in Tuscany, although there were some excellent popular banks. In that year an agricultural credit bank was formed in Florence with a capital of 6,000 liras held by 30 membres. Its progress was steady and rapid as is shown by the following figures taken from the Report of the Committee of Management for the year 1920. On 31 December 1920 the members numbered 570 and held 3,593 shares to the value of 359,300 liras. The advances to farmers in 1920 amounted to 8,009,740 liras, of which 839,250 liras were for seeds; 161,000 liras for fertilizers; 641,200 liras for the purchase of live stock; 438,200 liras for the purchase of machines; 2,820,500 liras for the purchase of land and for improvements; 43,200 liras for the intensification of cultivation; 2,580,390 liras for other agricultural purposes, and 432,000 liras to agricultural societies. The deposits on current account on 31 December 1920 amounted to 1,982,211 liras.

The authorization recently obtained to increase to 20,000 liras the amount of capital which each member can subscribe will enable the Bank to extend its work to new fields by aiding in the development of rural housing, of land reclamation and of home colonization (1).

UNION OF SOUTH AFRICA.

THE LAND AND AGRICULTURAL BANK OF SOUTH AFRICA. — REPORT OF THE
LAND AND AGRICULTURAL BANK OF SOUTH AFRICA FOR THE YEAR ENDING 31st. DECEMBER 1920. Cape Town, 1921.

The Report of the Land and Agricultural Bank of South Africa for 1920 states that in that year the Bank received 2,078 applications for advances totalling £2,436,270 as compared with 2,662 for £1,076,221 in 1919. There has been a steady increase in the amount of assistance asked for since 1915, when the Bank was compelled for a time to cease making advances. Owing to a shortage of funds the Central Board is at present compelled to restrict its advances in certain respects. The Bank still makes but small headway in the Cape Province, partly owing to the fact that its advantages are not sufficiently known, and partly because farmers in the Cape province have been able to obtain funds there at a low rate of interest. The Bank was, however, represented at the Agricultural Congress held at Port Elizabeth in October 1920, and opportunity was there taken of explaining to the Congress the working of the Bank.

(1) For some of the special features working of this Bank see: LUZZATTI (Luigi): *La Banca di credito agricolo di Firenze*, Tip. R. Ramella, Florence, 1920.

During the year 295 applications were received for fencing advances, (Fencing Advances Act, 17 of 1912) totalling £57,271, as compared with 162 applications totalling £21,742 in 1919. Of the 295 applications received during the year, 190 amounting to £35,276 were approved, one of £100 was withdrawn and the remainder were pending at the date of the Report. Fencing advances amounting to £23,919 11s. 2d. were paid out during the year. The Report notes that vermin-proof fencing continues to grow in favour, especially among "small-stock" farmers in the Cape and a proportion of the advances were for this type of fence.

There is an anomaly in the Fencing Act of 1912, in that the owner of a property desirous of improving his fencing cannot obtain an advance under the Act for the purpose, although the adjoining owner who is called upon to contribute to the cost of those improvements can obtain an advance to cover such contribution. The Board urges that this anomaly be removed by Parliament.

With regard to dipping tank advances (Act 20 of 1911) there were 255 applications received during the year totalling £37,557; of these 184, amounting to £28,070, were approved while 71 are pending. In 1919, 178 advances totalling £21,782 were made. The Report states that under the Dipping Tank Advances Act of 1911 and the Fencing Act of 1912, an eligible person is entitled to obtain a loan from the Bank, and very little, if any, discretion is left to the Bank in the matter. This places the Bank in an embarrassing position and the Board think that some consideration should be given to the funds at the Bank's disposal, and that the law should be amended in this direction.

The 41 advances totalling £13,150 made under Act 30 of 1916 on second mortgage have all been repaid with interest. Advances made, under Act 28 of 1916, from January 1917 onwards for the purpose of relieving distress, caused during 1916 by drought and flood in certain districts in the Cape province, totalled £50,538 11s. 8d. The loans were made to 293 farmers, and were used to purchase live stock, principally goats and sheep. An amount of £1,567 19s. 7d. was still outstanding in respect of capital and interest on 31 December 1920, all of which is overdue. The terms of repayment were:— Interest only (at 6 per cent. per annum) for the first six months and five equal half yearly instalments thereafter.

State-aid to settlers (holders of Crown land) is granted principally through the Department of Lands, but the Bank is empowered to grant loans to settlers under Act 18 of 1912 for improvements, purchase of stock, etc., under Act 20 of 1911 for the construction of dipping tanks, and under Act 17 of 1912 for the erection of boundary fencing. The Bank's assistance is supplementary to, and only given with the consent of the Department of Lands. It is thought by the Board that the supplementary assistance granted by the Bank should be discontinued.

Early in November the funds for the current financial year and the amounts on fixed deposit had been exhausted, and the Board was obliged

to stop granting any further advances and to apply the current receipts towards working off existing commitments. This occurred at a time when the needs of the farmers were most pressing and was something in the nature of a calamity. The decision of the Board was communicated to the Minister of Finance, who came to the conclusion that the system whereby the permanent capital of the Bank has to be earmarked for the cash credit requirements of co-operative societies is not sufficiently elastic. The Minister felt that the time had arrived to introduce legislation empowering the Bank to raise money on short date bills, or by overdraft or otherwise.

It is estimated that an amount of at least £1,680,000 will be required for Land Bank purposes during the financial year 1921-1922.

Under the German regime there was established in South West Africa an institution under the name of the Landwirtschaftsbank.

This institution was in the nature of a land bank; advances were made to farmers on mortgage and to co-operative societies, but in addition advances were made against promissory notes, deposits were taken from the public and the bank also undertook the negotiation of bills.

After an investigation of the affairs of the Landwirtschaftsbank by an official of the Union Land Bank it was decided by the Administration of the South-West Protectorate to place it in liquidation, and a proclamation was issued providing for this and for extending the operations of the Union Land Bank to the Protectorate. The necessary funds will be provided by the Administrator, but in all other respects the Protectorate will, for land bank purposes, be administered as an integral part of the Union.

Part IV : Miscellaneous Questions relating to Agricultural Economy

I. — ECONOMIC AND SOCIAL CONDITIONS OF THE AGRICULTURAL CLASSES

FRANCE.

THE STEPS TAKEN DURING THE WAR TO REPLACE MOBILIZED FARMERS AND FARM WORKERS.

§ I. THE FIRST EFFORTS AT ORGANIZATION.

The War of 1914 surprized France in the middle of the harvest, but except in the extreme North and in the East, where the invasion took place, the crops were almost completely gathered in. The President of the Council of Ministers had addressed an urgent appeal to French women. At the Ministry of Agriculture were received all the applications for work from workers whom unemployment in industry had left free. From the commencement of hostilities, more than 3,000 persons wrote individually to the Minister to ask him for work; of these 2,600 offered to do harvesting work. More than 12,000 offers of work, collected by agricultural syndicates, agricultural associations and individuals, transmitted by the Belgian and Roumanian Legations or emanating from Alsace-Lorraine, Italy and Spain, were also addressed to the Minister of Agriculture. Replies were at once sent to all these correspondents by an Agricultural Labour Office, which had been immediately organized in the Minister's Cabinet.

With the help of the great agricultural societies, of the Belgian Legation, etc., to whom the applications were immediately transmitted, it was made possible to utilize a considerable number of the applicants for agricultural labour. They were distributed chiefly in the districts in which large farms predominate in Seine, Seine-et-Oise, Aisne, Oise, Eure, Eure-et-Loir, Seine-Inférieure and afterwards in Yonne, Côte-d'Or, Indre and Loir-et-Cher. In Seine-et-Oise and in Loir-et-Cher more than 700 Belgians were provided with work. In other regions the available labour supply of the neighbouring countries was drawn upon. Thus, for example

several hundred labourers of French origin, belonging to Geneva, were employed in the 35 communes of Haute-Savoie (1).

Thanks to all these sources of labour, it was only necessary to utilize to a very limited extent the 20,000 sailors which the Ministries of War and of Marine had placed at the disposal of agriculture (Circular of the Minister of Agriculture to the Prefects, 4 August 1914).

At this time it was thought that the hostilities would not last long. When trench warfare began, the country was soon obliged to make provision for the preparation of future crops. All able-bodied adults having been called to the colours, it was necessary to send a certain number back to their homes during the busiest seasons. For this purpose the Minister of War, at the request of the Minister of Agriculture, allowed that leave to return home for the autumn sowing, for periods not exceeding 15 days, should be granted to the men of the territorial depôts outside the war zone who had been farmers or farm-workers (Circular of the Minister of Agriculture to the Prefects, 24 October 1914). At the beginning of the following spring, similar measures were taken for the spring sowing, the pruning of the vines and other spring work. Detailed instructions, published in the *Journal Officiel* of 3 February 1915, and a Circular of the Ministry of Agriculture to the Prefects laid down the precise conditions upon which leave was to be granted, spread over four periods, from 5 February to 5 April. Three months later, on 5 May 1915, by decision of the Minister of War, hay-making leaves were granted for a period of 15 days, to the farmers and farm-workers belonging to the territorial army and the territorial reserve.

The system of individual leaves rendered important services where cultivation was on a small scale; in the case of large and medium-sized farms its results could not be other than insignificant. Accordingly, as early as 12 March 1915, the Minister of War decided to form a certain number of companies of agricultural labourers with the object of helping the civilian labourers in the work of the fields. The experiment was on a modest scale, for it only applied to the war zone and the approximate total of the workers thus organized reached at the end of the month 6,000 men.

The officers and non-commissioned officers of the agricultural labourers' companies were chosen from amongst the officers of the territorial army and the non-commissioned officers of all branches of the territorial reserve who were declared to be unfit for active service. The men were taken from the depôts of all branches of the service (preferably from the territorial depôts in the case of infantry), from the men belonging to the auxiliary services and from the men unfit for active service. They were men who either had been engaged in agriculture or who were capable of making themselves useful either in the spring sowing or in the threshing. The horses were furnished by the depôts of the mounted services indicated by the general commanding a military district (*région*); carts and harness were requisitioned.

(1) MINISTÈRE DE L'AGRICULTURE: L'EFFORT AGRICOLE DE LA FRANCE PENDANT SIX MOIS DE GUERRE (AOÛT 1914-JANVIER 1915). Paris, Imprimerie Nationale, 1915.

This not very bold experiment was the first step towards the organization of a permanent body of labourers, side by side with the temporary labour furnished by the soldiers on leave. Necessity soon compelled the public authorities to take further steps in the same direction.

Agricultural work, in fact, lasts throughout the whole year; ploughing and sowing take place as well in spring as in autumn; haymaking, harvest, grape-gathering and threshing occupy the summer; pruning the vines and other accessory work take place in winter. Moreover the date on which each kind of work begins and ends is essentially variable according to the season, so that it had to be recognized that it is practically impossible to fix periodically by detailed regulation, as was attempted in 1915, the aid to be rendered by the army to agriculture in the execution of each of the kinds of work mentioned.

In view of these considerations, a Circular issued by the Minister of War on 22 December 1915, laid down a system of decentralization as the only means of regulating all cases with the necessary speed and efficiency. The generals commanding the military districts were given full power to supply to agriculture in all its forms the largest quantity of labour compatible with the state of war. As each military district covers several departments, the military authorities had to be assisted in each department by a permanent organization, at the same time consultative and executive.

In the war zone, a little later, the following organization was evolved (Instructions issued on 29 December 1919 by General Headquarters):

The officer commanding each unit as soon as he arrived in the commune in which he was stationed had the duty of:

(1) Examining the statement drawn up by the civil authorities of the urgent work to be done;

(2) Having the work immediately undertaken in the order of urgency with all the means at his disposal in men, horses, carts, etc.

If the statement of the work to be done was not to be found at the office of the mayor it was the duty of the officer commanding the unit himself to make inquiries as to the most urgent work and to see that it was begun at once.

On leaving the commune, he had to report on the state of the work which had been done by the men under his command; if a statement of the work done had not been drawn up, he had to leave at the mayor's office a note containing all the indications which might be useful for the troops who came after him.

In each army, an officer was specially appointed for the organization and direction of agricultural work in the zone of that army; it was his duty to put himself in relations with the prefects in order to obtain all necessary information and to make with them all necessary arrangements. He had to supervise the agricultural companies and the labourers detached from their units during certain periods to help the farmers; he had to give all information to the officers commanding units regarding the execution of agricultural work which their position enabled them to undertake.

The zone of each army was divided into agricultural sections; for each of these sections were appointed, to act under the orders of the officer in charge of agricultural work in the army, one or more non-commissioned officers belonging to the territorial army or the territorial reserve and carefully chosen as being professional farmers. These non-commissioned officers were to remain permanently at the same centres, so as to insure the continuity of the work in each section.

At the beginning of 1917, a Circular issued by the Minister of War on 12 January, placed at the disposal of agriculture, until further orders, soldiers of the classes which had been called up for training in 1888 and 1889, who had been farmers or farm-workers. These men, to whom were added successively the soldiers of other classes, were thenceforth the most important element in the permanent labour supplied by the State.

§ 2. PERMANENT LABOURERS.

Leaving out of account the free labourers, French or foreign, whose number it is impossible to estimate as they were under no official control, the permanent agricultural labourers were drawn, during the war, from the following sources:

(A) Men belonging to the older classes who had been detached for agricultural work;

(B) Wounded men in course of treatment;

(C) Students and school-children;

(D) Prisoners of war;

(E) Interned civilians;

(F) Russian military labourers;

(G) Colonial labourers;

(H) Foreign labourers.

We will speak separately of each of these classes.

(A) Men Belonging to the Older Classes who had been Detached for Agricultural Work.

The farmers and farm-workers belonging to the classes called up for training in 1888 and 1889 were, as we have seen, detached for agricultural work in accordance with a Circular issued by the Minister of War on 12 January 1917; by a Circular, issued jointly by the Ministers of War, Agriculture, Armaments and War Industries, dated 6 May 1917, the same measure was adopted in regard to farmers and farm-workers of the auxiliary services belonging to classes called up for training in 1895 or in previous years. The same Ministers afterwards extended the same measure to farmers and farm-workers of the combatant services of the 1890 class (Circular issued on 27 June 1917) and, later, to those of the combatant services of the 1891 class and to those of the 1892, 1893, 1894 and 1895 classes (except officers) who were fathers of five children or widowers with four children (Circular issued on 22 July 1917). A further Circular issued by the Ministers of

War and of Armaments and War Industries on 18 November 1917, detached for agricultural work farmers and farm-workers of the 1896 class belonging to the auxiliary services, and those who, belonging to the combatant services, were fathers of five children or widowers with four children. The same measure was taken in favour of the 1897 class by a Joint Circular of the Ministers of War, of Armaments and of War Industries issued on 6 September 1918.

At the end of 1917 the number of soldiers thus detached for work on the land was about 280,000 (1). They were employed in "agricultural gangs" (*équipes agricoles*) or in "travelling gangs" (*équipes volantes*) (2).

"*Agricultural Gangs.*" — By the expression "agricultural gangs" must be understood men detached under orders to work for the farmers of the department for a period varying from 15 to 20 days. A "gang" might even be composed of a single man.

The "agricultural gangs" were composed, in the first place, of agricultural labourers, to whom were added, in case of necessity, other labourers. They were formed on the application of the departmental committees (whose functions we will presently describe) at the beginning of each of the busy agricultural seasons.

"*Travelling Gangs.*" — The so-called "travelling gangs" were men supplied directly to the farmers by the officers commanding units or detachments, without the intervention of the departmental committees. The men were detached in the same way as those composing the "agricultural gangs" but for a smaller area (generally speaking for the canton or the neighbouring cantons) and for a shorter period, varying from half a day to a week. They were particularly useful for giving a helping hand at the times when the work was heaviest, as during the haymaking, the harvest and the grape-gathering.

Applications. — Applications for soldier labour were addressed in each department, to the Departmental Agricultural Labour Committee. Exceptionally "travelling gangs" could be supplied directly to the farmers by the officers commanding units or detachments.

Distribution. — In each department outside the war zone the Departmental Agricultural Labour Committee decided upon the applications made. The prefect, who was chairman of the Committee, afterwards forwarded the approved applications to the officers commanding subdivisions, who organized the gangs and distributed them amongst the cantons, where they were then placed at the disposal of the mayors or of the farmers by the Director of Agricultural Services.

In the war zone the Departmental Committees came to agreements with the military authorities as to the gangs to be distributed and the distribution was afterwards made by General Headquarters.

(1) *La Main-d'œuvre agricole*. Paris, 10 January 1918.

(2) The information which follows is taken from a Circular issued by the Minister of War on 27 April 1917.

Wages. — In the war zone, the daily wages of the soldier labourers were fixed as follows :

Payable to the State (in kind or in cash)	3 fr.
Payable to the labourer	1 fr.
Total	4 fr.

These sums were payable when the soldiers detached for agricultural work were distributed amongst the farmers, either individually or in groups, lived with their employers and thus really became agricultural labourers detached from their units for a longer or shorter period, the length of which was usually fixed in advance. When, on the contrary, these men (troops resting or staying in the camps on their way through) did not cease to draw rations or, at any rate, partly drew their rations, slept in camp, worked in groups formed for each occasion and remained always under the authority of their officers, no payment could be asked from the employer.

Outside the war zone, the wages payable to soldier labourers by the farmers depended upon the hours worked, which was determined by local custom. These wages were independent of the food, which was either supplied to the workers or compounded for by a special payment of 3fr. 50c.

The travelling expenses of the soldiers (both going and returning, railway and other conveyance), as well as their lodging, were payable by the farmers.

(B) *Wounded Men in Course of Treatment* (1).

From the beginning of the hostilities, Prof. S. Bergonié, of Bordeaux, put forward the idea that agricultural work was superior as a means of treating the after-effects of war wounds to the other methods practised in the hospitals and, in particular, to mechanical treatment. "The cure sought," he wrote later, "is only the sum of varied efforts and movements, slight and ineffectual at first, but afterwards larger and more effective. Now our wounded are almost all farmers or farm workers. If we place them on the land as soon as they have left the hospital, selecting them in accordance with the experience gained of results already obtained, they will find in their surroundings the accustomed movements, almost involuntary and hardly conscious, to which they have been trained since their childhood. These exercises, with or without the ancient and simple implements which the cultivation of the land requires, by the wide range of efforts to make and of powers to develop, of movements in all directions, of attitudes to take, have a technical superiority over the complicated mechanism used in hospitals for mechanical treatment. Our

(1) With regard to the employment of wounded men on the land, we confine ourselves to summarizing two communications made by Prof. S. Bergonié, of Bordeaux, to the *Académie d'Agriculture de France*, 2 May and 3 October 1917.

wounded work for their own cure almost in spite of themselves, the work so urges them to make their reflex movements, even when pain restrains them from doing so. They do not easily feel fatigue, precisely because their attention is not always fixed. They become cured more quickly because the necessary sum of efforts and movements is more quickly reached when they work in the fields all day and every day under medical supervision; they are more completely cured because the general health and the working of the lungs and heart improve with the rapid diminution of local powerlessness; finally their morale is incomparably better because they find in the house of their employer, who often lodges them and almost always eats and works with them, a family atmosphere more comfortable, free and cheerful than that of our convalescent hospitals."

As early as September 1914, Prof. Bergonié had practised the agricultural cure of wounded men in Auxiliary Hospital, No. 4, annex at Martillac (Gironde). In December 1914, twelve wounded were employed by three farmers and did, during the month, a total of 147 days' work. During 1915, on the average 24 wounded men worked daily for 10 employers. In July 1916, 78 farmers were employing 109 wounded men.

In view of the success of this organization a joint Circular, issued on 10 May 1917, and signed by the Minister of Agriculture and by the Under Secretary of State for the Service of Health, gave instructions for the formation of small hospital centres for agricultural cures in the country districts. A communication by Prof. Bergonié to the *Académie d'Agriculture de France* contains an account of the working of these centres.

Temporary Hospital No. 4, Grand-Lebrun, at Bordeaux, which included surgical wards and a great ward for physical treatment, containing in all 575 beds, evacuated to its annexes at Martillac and Cérons the wounded who were capable of benefiting by the agricultural cure. These evacuations, made on the basis of the daily reports of the Chief Medical Officer, took place every Sunday, so that the agricultural week might be complete, without interruption or loss of time. Before leaving the hospital the men were classified, first according to their strength and secondly according to their moral character and sobriety. The strength was inscribed on a card, which the wounded man carried openly. There were also written on the card the detailed diagnosis of the wound, the date on which it had been received, the name of the wounded man and the unit to which he belonged.

When the wounded man, thus ticketed, arrived at the annex, he was again examined by the medical officer who, being supplied with the complete dossier relating to the man, prescribed the work which he was to do.

On the other hand, the manager of the hospital had inquired from the farmers what work there was to be done in the commune or in the neighbouring communes, or even in communes some distance away; and, on the Sunday, the new wounded men were distributed amongst the farmers according to their needs and according to the distances.

Those who had only a quarter of the normal strength and, consequently,

had need of more frequent and more direct medical supervision, were not sent very far. They returned at midday for lunch, and in the evening for dinner and to sleep, and each time they returned they were subjected to medical and military supervision. Those who were not yet well-disciplined and those on whom the wine-shops exercised too strong an attraction, were also not sent very far; the adjutant and the non-commissioned officers who supervised them had them constantly under their eye and repressed, by friendly admonition, the first little lapses.

A second group left the hospital each morning to go to places within a radius of two kilometres. These only returned in the evening, taking the midday meal with their employer. Finally those whose good discipline had been proved and who had three quarters of their normal strength, were distributed amongst employers living sometimes at the extreme limit of the canton. These returned only once a week, on Saturdays, to be submitted, like their comrades, to examination by the Chief Medical Officer. These wounded men, working on distant farms, left the hospital early on Monday morning, either on foot or, if the distance exceeded six kilometres, in a conveyance. They were lodged and boarded by the employer. Many of these men were sent to places 12 to 14 kilometres from the hospital and the non-commissioned officers put over them for purposes of discipline and supervision visited each of them at the farm on which he was working on an average twice a week. This was a sufficient check upon them, as the Medical Officer had an infallible method of checking the carrying out of his prescriptions by examining the callosities on their hands which are the inevitable and sufficient indication of work done.

In the Department of Gironde alone there were in 1917 twelve hospital centres for agricultural cures, containing 647 beds. The wounded in these hospitals did 64,000 days of agricultural work between September 1914 and September 1917. Out of this number, 28,500 days were done between 10 May and 1 September 1917.

(C) *Students and Schoolchildren.*

The utilization of students and schoolchildren for agricultural work was contemplated for the first time on the approach of the haymaking season of 1915. On 14 June 1915 the Minister of Public Instruction issued a circular to the educational authorities instructing them to grant, in accordance with the Law of 28 March 1882, Article 15 (1), leave of absence from school for periods not exceeding three months in addition to the regular holidays.

In 1917, 1,200 hectares were cultivated in 12,000 communes by 90,000 girls and 125,000 boys.

(1) Article 15 of the Law of 28 March 1882 on leave of absence is as follows: "The School Committee may grant to children living with their parents or guardians, on the application of the parents or guardians and for sufficient reason, leave of absence from school for periods not exceeding three months in any one year in addition to the holidays."

The following is a statement of the crops and produce obtained :

Potatoes	8,000,000 kilogrammes
Cabbages	1,000,000
Leeks	1,250,000
Carrots and turnips	250,000 kilogrammes
Kidney beans, peas, beans, etc.	800,000 kilogrammes
Pigs	300
Rabbits	53,000
Poultry	15,000

The total value of the produce was 4,772,000 francs (1).

(D) *Prisoners of War.*

It was in 1915, too, that use began to be made in agriculture of the prisoners of war. A Circular issued by the Minister of War on 6 May of that year laid down the conditions of their employment. These conditions having varied but little in the course of the war, we will summarize them as they were in 1917 (2).

The prisoners were grouped in agricultural companies, composed as far as possible of farmers or of men who had some experience of agricultural work. The officers and non-commissioned officers, commanding detachments, were to be chosen from amongst those who, in civil life, had had some technical knowledge of agriculture.

In each department there was an agricultural company composed of the different gangs working in the department. Each company was placed at the disposal of the Departmental Agricultural Labour Committee, which gave the final decision in regard to all applications for prisoners of war to do agricultural work.

These applications had to be made, not by private individuals, but by agricultural syndicates, agricultural associations or communes, and the prisoners were placed at the disposal of individuals through their intervention.

The prefect could, however, act in place of the communes, syndicates or associations of the department and make, on behalf of all, a single agreement with the general commanding the military district for the labour of prisoners of war. The essential clauses of such an agreement were laid down by departmental regulations. The prisoners were placed at the disposal of employers after (1) they had signed an agreement to be bound by the regulations ; (2) they had prepared quarters for the prisoners and (3) the quarters had been approved by the military authorities. Then only was application made to the general commanding the military district to give the necessary movement order.

(1) *La Main-d'œuvre agricole*, 10 April 1918.

(2) *La Main-d'œuvre agricole*, February 1917.

The prisoners, formed into gangs of not more than ten, could be sent to their quarters as soon as the agreements had been signed, even without awaiting the execution of all the improvements required, a few days being allowed for carrying them out. When the time allowed had elapsed the prisoners might be withdrawn if the quarters were not considered satisfactory.

A gang might be placed at the disposal of the owner of threshing machines, provided he could be regarded as performing a service to the community as a whole. This condition might be fulfilled by inserting in the agreement a clause fixing the maximum fees which the owner of the threshing machines could charge to the farmers and obliging him to place the machines at the disposal of all the farmers applying for their use within a certain area, in the order of their applications. Each gang was attached to a particular machine and followed it from place to place. They could pass the night on the farm on which the day's work had been done or on the farm on which they were to work the following day. The minimum number of prisoners in such a gang was, in general, twenty. Nevertheless, if the urgent needs of the work to be done required the employment of half-gangs of ten prisoners to each machine, the district commandant of the depôts of prisoners of war had full power to authorize this exception.

The prisoners sent to work in forests directly exploited by the forestry administration were distinct from the departmental gangs. They formed a special group, organized in gangs which could be sent according to the needs from one State forest to another in the military district.

Lodging, Bedding, Heating, Lighting, etc. — When the employer undertook to provide lodging, bedding, heating and lighting for the prisoners, as well as for their guards, he had to conform to the following regulations.

The prisoners were to be lodged in closed premises, easy to guard and selected by preference as being at a distance from other dwellings; the premises had, moreover, to be approved by the military authorities.

Each prisoner was to be provided with a straw mattress containing at least five kilogrammes of straw; this straw was to be renewed every fortnight. The mattress was to rest on a plank or on a support placed at least 12 centimetres above the floor if it were tiled or of beaten earth.

The guard was to be lodged on closed premises apart from those in which the prisoners were lodged and these premises also had to be approved by the military authority. The bedding for the men forming the guard was to be supplied by the employer.

The premises in which the guard were lodged and the approaches to them were to be lighted all night. They were also to be provided with the means for lighting them adequately during waking hours.

Heating was to be provided in winter from 1 November to 31 March.

The cooking-stoves, the fuel necessary for cooking the food, the utensils required for the preparation of meals and the various receptacles, as well as benches and tables, were to be provided by the employer, but not

objects of personal use such as table-cloths, mess-tins, mugs, spoons and forks.

The employer was also to supply the water necessary for ablutions and for washing clothes and to place buckets or half-barrels at the disposal of the prisoners at the rate of one for every ten men.

Medical Attendance. Medical attendance for prisoners of war was provided by the Military Administration, which arranged for periodical visits as frequently as possible. The employer, however, had to provide premises to serve as a provisional ambulance. He had also to place at the disposal of the non-commissioned officer in charge of the guard a small locked medicine chest containing the most necessary medicaments. In urgent cases, the employer provided immediate medical attendance by calling in civilian doctors.

Conditions of Labour. — The number of hours normally worked per day by the prisoners was the same as the number worked by civilian labourers in the district engaged in the same class of work.

As a rule the prisoners were not compelled to work on Sundays and holidays, but exceptions could be made to this rule when the work to be done was urgent.

The Gang System. — Prisoners could only be employed on the land in gangs. In the war zone, the gangs could not consist of less than 10 men, strongly guarded. Outside the war zone, gangs of 20 men, which might be divided into smaller groups of 10 or 5 men, with separate quarters, were placed at the disposal of communes or agricultural syndicates. Separate quarters could not be established for groups of less than five men.

Wages. — The wages paid consisted of three parts, of which the first two, one fixed and the other variable, were paid to the State and the third was given as pocket-money to the prisoners.

A. The Fixed Part Payable to the State. — The fixed part served as repayment of the expenses incurred by the military administration for the maintenance of the prisoners.

Three cases must be considered.

(1) *Lodging, Heating, Lighting and Food Provided by the Employer.* — If the employer provided the lodging, heating, lighting and food for the prisoners he had to pay for each of them a sum of 40 centimes per day, of which 30 centimes represented the cost of ordinary clothing, 5 centimes the provision of working clothes, and 5 centimes the cost of conveying the prisoners to the farm and removing them.

(2) *Lodging, Heating and Lighting Provided by the Employer.* — If the employer only provided lodging, heating and lighting for the prisoners their food being supplied at the expense of the State, the employer had to pay a total sum of 1 franc 33 centimes per day for each of them.

(3) *Lodging, Heating, Lighting and Food Not Provided by the Employer.* — If the employer provided neither lodging, heating, lighting nor food, the fixed sum payable by him to the State was 1 franc 47 centimes per day.

B. Variable Part Payable to the State. — The variable part payable

to the State was such as to equalize the total wages payable by the employer to the State for the work of prisoners of war to the normal wages in the district of civilian labourers employed in similar work, taking into consideration the return from the two kinds of worker. It took account, on the one hand, of the probable number of full days' work as well as of the smaller return obtainable from prisoner labour when there was special or difficult work to be done or the gangs were not yet accustomed to work of the kind required ; on the other hand, of the advantage resulting to the employer from the fact that he incurred no pecuniary liability in respect of accidents which might happen during the work on his farm, except in case of gross carelessness on his part or on that of his representatives.

The rate for the variable part of the wages of the prisoners of war as stated in the agreements made for the employment of agricultural gangs, was fixed by the Departmental Agricultural Labour Committee which could, if necessary, reduce this part even to zero during the winter season.

C. *Pocket-money given to the Prisoners.* -- Besides the payments mentioned above, the employer had to pay, for each prisoner and for each day's work, a sum of 20 centimes, which was given to the prisoner as pocket-money. This sum might, in exceptional cases, be increased to at most 80 centimes, according to the quality or the amount of the work done by the prisoner. It might be withheld, as a disciplinary measure, on the recommendation of the non commissioned officer in charge of the guard, if the prisoner did not work as hard as he was capable of doing.

The employer might, if he preferred it, give extra food in place of part of the additional pocket-money which he thought fit to give to prisoners whose work was particularly satisfactory.

In cases in which the work was prolonged beyond the normal number of hours, the following payments were made : (1) An additional payment of 10 centimes for each hour of overtime ; (2) an additional payment varying from 30 to 50 centimes per half-day for Sunday work, when this overtime work was not compensated for by a rest of equal duration in the course of the week.

It was compulsory to make these additional payments in kind and they were never made in cash.

Penalties. -- Prisoners who gave proof of unwillingness to work, of want of energy, or of laziness, were set to do the hardest work.

If imprisonment or detention in the cells was considered indispensable to cure the want of energy, or the passive resistance of the prisoner, these punishments were inflicted in the following manner :

The prisoners punished with imprisonment were shut up in a room specially set aside for use as a prison. They slept on a camp-bed or on bed-boards, without mattress, and with only one blanket as bedding. They were compelled to work during the day and put to the hardest kind of work which was being done by the gang to which they belonged. Being compelled to work, they received the same food as the workers, but without any extras. The punishment of imprisonment involved, of course, the withholding of the pocket-money.

Prisoners of German nationality who were condemned to detention in cells, were, in order to equalize their treatment to that given to French prisoners in Germany, placed upon bread and water, with the normal food of non-workers every four days. For prisoners of other nationalities, the punishment was administered in successive periods of four days in cells and two days of prison, and when they were in the cells they received bread and soup twice a day, the soup in one case being without meat.

During detention in cells the prisoners, whatever their nationality, remained always in solitary confinement.

For exceptionally serious offences, the prisoners could be court-martialled.

Number of Prisoners Employed and Results. — At the end of 1917 there were about 45,000 prisoners of war employed in agriculture (1). According to a communication made in 1917 to the *Académie d'Agriculture de France* by M. de Marcillac, it was principally in the northern military district that applications were made for their labour. The reasons for this are various — crops similar to those most cultivated in Germany and similar methods of cultivation, large areas adapted to the employment of labourers grouped in guarded gangs, and also certain resemblances in customs and kinds of food. On the other hand, south of the Loire, particularly in the districts of the Central Heights and of the South-West, in the Valley of the Rhone and in the South, the people were decidedly averse from employing prisoners.

The experience of the agricultural syndicate of Beauregard and of the adjoining communes (Dordogne), of which M. de Marcillac was president, clearly indicates the precise value of this kind of labour.

The first gang obtained by the syndicate on 6 May 1916 contained 20 prisoners accompanied by five guards, a bookkeeper and a sergeant. The gang was soon increased to 25 and afterwards, during harvest, to 30 men, with an additional guard.

"Quartered on an abandoned farm previously held by métayage," writes M. de Martillac, "it was spread over five communes; the other communes which composed the area of operations of the syndicate were too far away to be able to utilize this labour.

"The farm most distant from the prisoners' quarters to which they were sent was sometimes nearly four kilometres distant, and the prisoners had to walk to it along by-roads; even this distance was too great as there was risk of the prisoners escaping and the amount of work done by the prisoners on this farm was reduced.

"The gang was divided into two permanent groups generally working on three medium-sized farms, either by rotation or permanently, according to the nature of the work, and a 'travelling gang,' to which a second was added during haymaking and harvest, which worked only for the small farmers.

"The rotation was fixed by fortnight or by week by a committee,

(1) *La Main-d'œuvre agricole*, 10 January 1918.

consisting of three members, appointed by the syndicate. Fifty small farmers availed themselves of the 'travelling gang' which, between 5 May and 14 October did 2,807 full days' work for 3,826 days' attendance.

"The farm on which the prisoners were quartered having been taken by a métayer, the prisoners' quarters were removed, but the commune furthest from their quarters which had hitherto taken advantage of their work, immediately made an application, and four landowners in the commune combined to employ a gang. Further off, in two other communes included in the area of operations of the syndicate which had not been able to avail themselves of the first gang, on account of their distance, a group of three landowners, who were joined later by two others, followed our example and arranged to employ ten prisoners of war by rotation amongst them. Two other similar groups were organized a little further away.

"At Beauregard, in 1917, in another abandoned farm, lent by the owner, another gang was quartered, but it was not so numerous, on account of the other gangs in the neighbourhood. A gang of ten, soon afterwards increased to 15, with three guards and a non-commissioned officer, were allotted to us on 25 March; it was not sufficient to satisfy all the needs of the small farmers. We had, however, taken measures to increase the subdivision of the gang, entrusting one group of two or three men to the communal road-inspector, who during the harvest was thus employed instead of at his ordinary work."

The foregoing account gives a vivid impression of the gangs and their adaptation to the needs of agriculture; it may also be noted how the demand of the farmers for prisoner labour grows as the experiment conducted under their eyes gradually convinces them of its value. The following statistics, which we also take from M. de Marcillac's communication, indicate, on the other hand, its inferiority to free labour:

"From 25 March to 1 November 1917, 2,154 days of work were done for 3,010 days of presence; 40 small farmers benefited by the work of the prisoners to the extent of 800 or 900 days.

"It will be noted that there is a considerable difference between the number of days of work and the number of days of presence. The number of days on which no work was done was 36 per cent. of the number of days of work and 26 per cent. of the number of days of presence. There were 1,020 such days out of 3,826 days of attendance, including 550 Sundays and holidays, 85 days of rain, 114 days of illness, and 281 days represented by the presence of the cooks and of the feldwebel, who did not work on the land. In 1917 the proportion was even greater; it amounted to almost 40 per cent. of the days of work and to 28 per cent. of the days of presence, or to 856 days on which no work was done out of 3,010 days of presence, although in this year there was no feldwebel. The relaxation of discipline increased the number of days lost on account of illness, and the number of days lost on account of bad weather also increased.

"It is this wastage, these days on which no work is done, which in-

crease the cost in a very high proportion, and they must be taken into account in comparing the cost of prisoner labour with that of the local labour, as also must the fact that the local labourers can do work which prisoners unaccustomed to it and working in gangs cannot do."

(I^a) and (I^b) *Interned Civilians and Russian Soldier Labourers.*

A few words will suffice in regard to these two classes. We confine ourselves to saying that, during the war, about 2,000 interned civilians asked permission to leave the concentration camps to do agricultural work and were placed at the disposal of a certain number of Departmental Committees, which proceeded to distribute them. On the other hand, Russian soldiers having ceased to be used in the army were distributed amongst the different Government Departments which employed labour. The Ministry of Agriculture was allotted 2,000 of them, and they were distributed in much the same way as the prisoners of war (r).

(G) *Colonial Labourers.*

In the early part of 1915, the National Agricultural Labour Office, of which we shall have occasion to speak later, inquired from the Governor-General of Algeria whether it would be possible to call upon the agricultural labourers of the colony. The reply was that, in the circumstances, the attempt would have little chance of success; nevertheless, on the insistence of the President of the Council of Ministers himself, the Governor-General was asked to organize the attempt. This was at the end of June; time was pressing and it was not easy to organize large convoys. From the general point of view, therefore, very effective help from the Algerian contingents could not be expected, but it was important to try the experiment.

The Governor-General of Algeria was informed that labourers going to France would receive wages of 5 francs per day, without food, or 3 francs 50 centimes with food, and in addition, the journey to France would be at the expense of the employer. Their stay might be from one month to four months.

In the middle of July, the Governor of Algeria reported that 800 labourers were ready to start. The Prefect of Eure-et-Loir having applied to the Minister of the Interior for the help of native labourers for harvesting in his department, this contingent was offered to him. The offer having been accepted, arrangements were immediately made to send from Marseilles to Chartres a convoy of 821 labourers, who had been embarked in four parties from Philippeville, Algiers, Bona and Oran.

Later on, 216 labourers were taken to Orleans at the request of the Prefect of Loiret.

(1) *La Main-d'œuvre agricole*, 10 January 1918.

The first convoy of kabyles reached Eure-et-Loir on July 26. It included a large number of old men, children and persons unfit for work. Moreover, amongst the agricultural labourers persons quite unaccustomed to agricultural work had slipped in when they were leaving Algeria — hawkers, dock labourers, waiters, bootblacks, chauffeurs, etc. — all animated by the worst possible spirit and declaring that they had not come to France to work in the fields, but to carry on their usual trade.

From the very first, it was necessary to send home a certain number of persons suffering from consumption, fever and other illnesses. At the beginning, too, the defections were numerous. Attracted by the desire to visit Paris, many not only amongst the hawkers, but also amongst the agricultural workers, some of whom had come with that object alone, left their work soon after their arrival, and persuaded some of their compatriots to go with them, and this just at the time when harvest work was becoming most pressing.

The Loiret contingent did not reach Orleans until 23 August, when the harvest was nearly over and the need of labour had become less imperative. It was necessary to employ a considerable number of these labourers at the work of threshing, which requires strong arms and a training which the Algerians do not possess. Out of 216, a hundred left their employers a few days after their arrival, alleging various motives, such as that they were being fed on pork or that the work was excessive. Of these kabyles, some went to Clermont-Ferrand to work in the rubber factories, others to Saint-Etienne to work in the mines; some even reached Paris, Rouen and Lyons.

On the other hand, both in Eure-et-Loir and in Loiret, very good qualities were found in a fair number of the labourers. They were very anxious to learn methods of cultivation which were new to them and which they would be able to apply later on in their own country. Consequently they tried hard to understand them and soon after their arrival they rendered the farmers who employed them services quite as valuable as those of the ordinary labourer. In Loiret, out of 216 labourers, 80 showed all the qualities required for being usefully employed (1).

In a word, for want of careful selection, the experiment tried in 1915 could not give conclusive results.

The war continuing, the Government of the Protectorate of the Regency of Tunis, at the pressing request of the French Government, asked the Bey in 1917 to authorize the raising and sending to France for work in agriculture of the second part of the contingent of the native class of 1917 (young men from 18 to 20 years old), including those who had drawn high numbers, those who were unfit for combatant service, and those who were the supports of families, all these having hitherto been exempt from any service. The measure asked was authorized in a Decree issued

(1) The foregoing is summarized from the reports of the Prefect of Eure-et-Loir and of the Director of Agricultural Services of Loiret, published in *La Main d'œuvre agricole* of April 1916.

by the Bey on 31 January 1917, and the first convoys of Tunisian labourers landed at Marseilles at the end of March.

The Tunisian labourers were compelled to do agricultural work in France for a period not less than one year nor more than the period during which their class remained with the colours. Placed in charge of non-commissioned officers chosen from among the colonists, employees or officials who resided in Tunis and were familiar with the Arabic language, they were clothed and equipped by the military administration, were subjected to the military code, and were entitled to wages of 5 francs per day of work done, out of which 2 francs was withheld to provide their food. The distribution and utilization of the gangs were entrusted to the Prefects, acting in this as representatives of the Ministry of Agriculture (1).

In 1917 there were 4,400 Tunisian agricultural labourers in France, distributed over 14 departments. In the same year 700 Indo-Chinese, under military discipline, were also at the disposal of the Minister of Agriculture (2).

(H) *Foreign Labourers.*

The recruiting of foreign labourers was entrusted to the National Agricultural Labour Office, and we shall see how it was carried out when we study the working of that institution. We shall, then, confine ourselves here to giving the statistics of the immigration of foreign labourers between 1 April 1915 and 31 December 1918.

Immigration of Foreign Agricultural Labourers between 1 April 1915 and 31 December 1918.

Spanish and Portuguese.

Year *	Men	Women	Children	Total
1915	9,814	2,755	1,892	14,461
1916	36,141	6,849	5,596	48,586
1917	36,883	6,897	3,530	47,310
1918	29,034	5,310	1,745	36,089
Total . . .	111,872	21,811	12,763	146,446

(1) *La Main-d'œuvre agricole*, 25 September 1917.

(2) *La Main-d'œuvre agricole*, 10 January 1918.

Italians.

Year	Men	Women	Children	Total
1915 (1)	—			
1916	223	66	51	343
1917	300	96	12	408
1918	1,044	369	61	1,471
Total . . .	1,567	531	127	2,225

(1) Information not available.

La Main-d'œuvre agricole of June 1921, which gives these figures from information furnished by the National Agricultural Labour Office, states that each year the number of foreign agricultural labourers who left France was 36.67 per cent. of the number of immigrants.

§ 3. TEMPORARY LABOURERS.

Whatever may have been the quantity of permanent labour as long as mobilization lasted, it was necessary to continue to grant leave at the times when certain kinds of work had to be done to the farmers and farm-workers who were with the colours. In 1916, leave was granted for the hay-harvest (25 May 1916), for the grape-gathering (11 August 1916), for the digging of sugar-beets (20 September 1916), and for ploughing and sowing (26 September 1916). Leave for longer periods (postponement of the call to the colours) was even granted under a Circular dated 11 June 1916 issued by the Minister of War as the result of a vote in the Chamber of Deputies. On 9 June the Chamber had passed a resolution requesting the Minister "to postpone the call to the colours, during the haymaking and the harvest, of the reservists of the territorial army belonging to the auxiliary services who followed agricultural occupations or occupations connected with the cultivation of the land, and to seek out, with a view to placing them at the disposal of agriculture during the same period, all the farmers and farm-workers belonging to the auxiliary services whose presence is not considered indispensable in the dépôts, and to take such measures that permissions to enter the war zone for agricultural purposes should henceforth be granted at any rate to soldiers stationed outside the war zone."

In 1917 we may note a telegram sent by the Minister of War on 13 May granting, for the spring sowing, 20 days' leave to all farmers and farm-workers, without exception of class or category, who were mobilized and stationed outside the war zone, and a Circular issued by the same Minister on 10 August granting 20 days' leave for the grape-gathering to all vine-growers in service in the various military districts.

Two measures related to the last year of the war :

On 12 May 1918 a Circular was issued by the Minister of War assigning to each officer commanding a dépôt a district in which he would have to see that labour for the haymaking was provided, all the available men in the dépôt being temporarily employed at this work.

A little later, on 29 May, a further Circular issued by the Minister of War placed temporarily at the disposal of the Minister of Agriculture, to satisfy the urgent needs of the haymaking and the harvest, the men belonging to the following categories :

(a) Soldiers of the 1892 Class, who had been farmers or farm-workers, and were in the dépôts, services and establishments of the territory (combatant services) ;

(b) Men of all professions of the 1919 Class (Auxiliary services), with the exception of soldiers of this category belonging to the formations and services of the military aviation establishments and to the motor services.

These men were organized in gangs of labourers which went from place to place and consisted of about 40 to 50 men belonging to the two categories above mentioned and under the charge of at least two or three non-commissioned officers chosen from the farmers or farm-workers belonging to the 1892 Class.

On 11 November the Armistice put an end to all these occasional measures. On 15 November, the 1887, 1888 and 1889 Classes were demobilized ; on 25 November the 1890 Class and on 7 December the 1891 Class. The area sown to wheat, which in 1917-18 only amounted to 4,191,450 hectares, was increased to 4,390,880 hectares and the crop harvested rose to 36,625,570 quintals in 1918 and to 61,435,480 quintals in 1919.

(To be continued).

MISCELLANEOUS INFORMATION RELATING TO THE CONDITIONS OF THE AGRICULTURAL CLASSES.

EGYPT.

THE AGRICULTURAL POPULATION. - From information supplied by the Ministry of Agriculture.

In Egypt the rural population constitutes over 88 % of the total population. It falls in five categories :

(1) Small land-owners possessing not more than 10 feddans and constituting 14.1 % of the rural population. They are personally engaged in the cultivation of their own lands.

(2) Larger land-owners holding more than 10 feddans, who are either personally engaged in the cultivation of their own property or lease it to small cultivators ; they constitute 1.3 %.

(3) Tenants who take on lease as much land as they can afford to cultivate with the help of members of their families.

(4) Metayers who are personally interested in the yield of the land they work on. Their personal interest calls upon them to make the best of it.

(5) Labourers, constituting a very small proportion of the rural population, who are only resorted to in cases of emergency, as the whole work is carried out, in practically all cases, by the cultivators directly interested in the yield and by members of their families.

As a matter of fact, this last category cannot be regarded as a real class of labourers in the proper sense of the word. Without explaining in detail the secular systems adopted to secure their collaboration, it may be pointed out briefly that in the majority of cases they are not paid in specie but in kind, for example, from half a kela (1) to two kelas of wheat, one kela to four kelas of barley, one quarter of a kela to two kelas of beans, etc. according to the nature of the work they do. On the other hand they are not, in the majority of cases, day-labourers, but are compensated for the amount of work they produce.

FRANCIS COLONIES.

THE QUESTION OF AGRICULTURAL LABOUR IN NEW CALEDONIA. — *L'Océan Français*. Paris, March-April 1921.

Agricultural labour is becoming more and more difficult to obtain in New Caledonia, as the natives and immigrants leave the farms and go to the mines, which offer them higher wages.

The Government has appointed a Committee to inquire into all methods of obtaining a more regular and less uncertain supply of Malay, Asiatic or other labour for local agriculture, as well as for the industries and trades connected with it, and to submit proposals to the Administration with this object.

On the other hand, an Order, dated 24 January 1921, has made the following amendments to that of 4 January 1917 which regulates the employment of native labour in the gathering of the coffee crop. Wages are fixed at 20 francs per month, payable as follows: 15 francs to the Immigration Office and 5 francs to the native in presence of the headman. At the end of the contract the administration will forward to its representative in the district to which the native belongs the sums paid on his behalf to the Immigration Office. These sums will be handed to the native in the presence of his relatives and of the chief of the tribe. But to obtain the labour required it would be necessary to compel the natives to work. In fact, some of them have been known to ask wages of 30 francs per day, which is equivalent to a refusal to work.

(1) A kela = 16.5 litres.

II. — LAND SYSTEMS

AUSTRALIA.

THE PROGRESS OF LAND SETTLEMENT.

SOURCE (OFFICIAL):

THE OFFICIAL YEAR BOOK OF THE COMMONWEALTH OF AUSTRALIA, NO 13, 1901-1919, Melbourne 1920.

From time to time we have given information concerning land settlement in various states of Australia. We now take the opportunity of giving such information for the whole of Australia and of bringing it as far as possible up to date to the end of the financial year 1918-1919. As we intend to deal with the question of soldier settlement at a later date, no detailed information on this subject is given in this article.

§ 1. LAND LEGISLATION IN INDIVIDUAL STATES.

New South Wales. — The Crown Lands Act of 1884 and the Supplementary Act of 1889 (now incorporated in the Crown Lands Consolidation Act 1913) were passed chiefly for the purpose of putting an end to speculative selection without *bona fide* intention of settlement. Nevertheless accumulation of land into large estates continued, and settlement proceeded slowly. Entirely new principles of agrarian legislation have been embodied in the Crown Lands Acts passed in the years 1895 to 1919, and Closer Settlement Acts 1904 to 1919, also the Closer Settlement Promotion Act 1910, now incorporated in the Closer Settlement Amendment Act 1918, which offers *bona fide* settlers special inducements by the introduction of new forms of tenure on easy terms and conditions. In the Western Division of New South Wales new amendments to the Western Lands Act were made in 1918 and 1919.

Victoria. — The Land Act of 1915 deals with the whole system of land occupation and alienation in this State, and all clauses of closer settlement are now included in the Closer Settlement Act 1915 and the Discharged Soldiers' Settlement Act 1917.

Queensland. — The Acts now in force are the Land Acts 1910 to 1919, the Closer Settlement Acts 1906 to 1917 and the Discharged Soldiers' Settlement Act 1917. The first mentioned acts substitute perpetual leasehold tenures for freeholding tenures in the case of all new selections and auction purchases, but conversion of existing holdings to the leasehold tenure is optional with the selector. The last mentioned Act provides for the settlement of discharged soldiers on Crown land, land acquired under

the Closer Settlement Acts, or land acquired specially for soldier settlement.

South Australia. — The Crown Lands Act 1915 repealed and consolidated previous Acts and also consolidated the Closer Settlement and Village Settlement Acts. The Pastoral Act 1904 controls the pastoral occupation of lands, and the Irrigation and Reclaimed Lands Act of 1914 provides for leases of reclaimed and irrigable lands.

Western Australia. — The Land Act 1898 which deals with legislation relating to the management of Crown lands has been amended at various times and is still in force. The Discharged Soldiers' Settlement Act 1918 provides for the settlement of discharged soldiers and sailors on the land. The principle of repurchasing Crown Lands for the purpose of Closer Settlement is consolidated by the Agricultural Lands Purchase Act 1909.

Tasmania. — The law relating to land tenure and settlement is now consolidated in the Crown Lands Act 1911, the Closer Settlement Act 1913, and the Returned Soldiers' Settlement Act 1916 and its amendments.

Northern Territory. — The conditions of land tenure and settlement are now determined by the Crown Lands Ordinance.

In each of the States of the Commonwealth there is now a Lands Department under the direction of a responsible Cabinet Minister, who is charged generally with the administration of the acts relating to the alienation, occupation and management of Crown lands. The administration of these departments is decentralized by the division of the States into Land Districts, in each of which there is a Land Office, under the management of a land officer, who deals with applications for selection and other matters appertaining to the administration of the Acts within the particular district. In some of the States there is also a local Land Board or a Commissioner for each District or group of Districts. In the Northern Territory the administration of the regulations relating to the occupation and management of Crown lands is in the hands of a Classification Board, consisting of the Director of Lands and two other officers appointed by the Administrator.

§ 2. FREE GRANTS, RESERVATIONS AND DEDICATIONS.

Although free grants of Crown lands were virtually abolished as far back as 1831, the Land Acts of all the States now contain provisions under which the free alienation or occupation of Crown lands for certain specified purposes — comprising generally charitable, educational and public purposes — is allowed. In all the States, too, Crown Lands may be excepted from sale and reserved to the Crown or dedicated for various public and special purposes. Generally, reservation and dedication are conditions precedent to the issue of a free grant. In addition to reservations of a permanent nature, temporary reservations are also made, but these are, as a rule, subject to considerable fluctuations in area by reason of withdrawals, renotifications and fresh reservations.

Table I shows the area for which free grants were issued and the areas permanently reserved or dedicated in each State from 1914 to 1918 inclusive.

TABLE I. — *Particulars of Free Grants, Reservations and Dedications, 1914-1918.*

Year	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Commonwealth
<i>Free Grants.</i>							
	Acres	Acres	Acres	Acres	Acres	Acres	Acres
1914	1,888	290	295	33	17	223	2,740
1915	1,596	96	1,271	22	3	172	3,160
1916	1,679	26	18	6,556	1	17	8,297
1917	2,066	51	18	250	7	11(a)	2,406
1918	926	25	33	309	Nil	5	1,298
<i>Reservations and Dedications.</i>							
1914	1,430	5,303	—	16,120	502,167	6,718	531,738
1915	512	2,280	103,191	16,738	173,155	27,066	353,245
1916	2,126	6,482(b)	8,251	21,390	157,601	1,602	197,752
1917	779	7,637	906,008	10,312	151,110	6,717(a)	1,085,563
1918	501	1,581	142,081	12,760	274,391	10,153	441,767

(a) These are free leases for 99 years.

(b) Including 222 acres reserved for recreation grounds.

In *New South Wales*, during the financial year 1918-19, the total area for which free grants were prepared was 1,118 acres, including grants of 1,099 acres of land resumed under clause 12 of the Public Roads Act 1902. Also 381 acres were dedicated and permanently reserved, the number of separate dedications being 53. On 30 June 1919, the total area temporarily reserved was 22,732,240 acres, of which 6,090,618 acres were for travelling stock, 3,739,427 acres for forest reserves, 922,034 acres for water, 1,307,530 acres for mining, and the remainder for temporary commons, railways, recreation and parks, and miscellaneous purposes.

In *Victoria* during 1918 there were issued 2 free grants, comprising an area of 25 acres; also permanent and temporary reservations, comprising an area of 1,581 acres, were made: of this area 211 acres were reserved for recreation grounds.

In *Queensland* during 1918 there were 3 free grants issued for a total area of 33 acres. The area of reserves cancelled was 142,081 acres in excess of areas set apart as reserves. The total area reserved up to the end of 1918 was 14,312,706 acres.

In *South Australia* during 1918 there were 20 free grants issued for a total area of 309 acres, and reserves comprising 12,780 acres were proclaimed.

In *Western Australia* during 1918, no free grants were issued, the area reserved was 274,391 acres.

In *Tasmania* during 1918, there were issued 2 free leases, comprising an area of 5 acres; also 10,453 acres were reserved, of which 240 acres were reserved for scenic purposes, 1 acre for recreation, 3,000 for wild-fowl sanctuaries, 11 acres for hospital reserves, 1 acre for cemetery purposes, and 7,200 acres for other purposes. The total area reserved from sale and selection to the end of the year 1918 was 4,800,000 acres.

§ 3. SALES BY AUCTION AND SPECIAL SALES.

In all the States, sales by auction of Crown lands are held from time to time. Notifications of such sales are given in the *Government Gazettes* together with particulars as to the upset price and conditions of sale. Excepting in the case of *South Australia*, where land is sold at auction for cash only, the purchase may be either for cash, or on credit by deferred payments. In most of the States land may also be purchased by private contract at the upset price, when it has been offered at auction and not sold. In the case of auction sales on credit in the States of *Western Australia* and *Tasmania*, certain improvement conditions are imposed, and such sales are therefore classed for the purposes of this article among *Conditional Purchases* (see § 4). In most of the States comparatively small areas of Crown lands may be sold without competition under special circumstances. Sales by auction and special sales under *Closer Settlement Acts* are referred to in § 6.

Table II (page 546) shows the areas of Crown lands alienated by auction and special sales in each state from 1914 to 1919. The figures given for *New South Wales* include improvement purchase tenures, and those for *Queensland*, perpetual leases, freeholding tenures and unconditional selections. This last form of tenure is similar to that of a sale by auction with deferred payment. The minimum price for land is 13s. 4d. an acre, payable in twenty annual instalments, and the maximum area granted to the applicant is 1,280 acres. A deed of grant may be obtained upon payment of the purchase money. Selection under this tenure ceased in 1916.

In *New South Wales* during the year ended 30 June 1919, the area of Crown lands sold by auction and special sales for which grants were prepared amounted to 12,126 acres, of which 10,261 acres were sold by auction in 773 lots; 630 acres were sold by after-auction sales in 369 lots; 31 acres were sold as improvement purchases in 51 lots; and 1,204 acres were sold as special purchases in 159 lots.

In *Queensland* during 1918 there were auction sales, under perpetual lease, of 163 acres for town areas, 428 acres for suburban areas, and 1,218 acres for country areas — a total of 1,809 acres.

TABLE II. — *Auction and Special Sales, 1914-1919.*

	New South Wales	Victoria	Queens- land	South Australia	Western Australia	Tasmania	Common- wealth
	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>
1911.	3,600 (a)	3,705	18,797	51,248	890	2,260	80,500
1915.	2,117 (a)	3,287	9,938	29,081	1,396	339	46,488
1916.	3,265	2,061	4,714	30,799	419	170	41,428
1917.	2,059	1,778	2,874	36,964	513	133	44,551
1918.	11,961	2,846	1,809	29,921	964	310	47,611
1919.	13,175	—	—	—	277	—	13,752

(a) Exclusive of frontage sold under the Centennial Park Sale Act.

§ 4. CONDITIONAL PURCHASES.

In all States of the Commonwealth except Queensland since 1916 the freehold of the land may be acquired under what are known as systems of conditional purchase by deferred payments of half-yearly or yearly instalments. Certain conditions, generally as to residence and improvements, have to be complied with before the freehold is granted, but these conditions are usually of a light nature and are inserted chiefly with the object of guaranteeing that the occupier will become of benefit to the community by making a reasonable effort to render his holding wealth-producing.

As a rule, a lease or licence for a certain period is first issued to the selector, and upon fulfilment of the prescribed conditions and payment of the full amount of the purchase-money the freehold is conveyed to him. In Queensland, prior to 1 January 1917, "free" homesteads could be acquired, and they can still be acquired in Western Australia. Although under these tenures no purchase-money is payable, the grant is conditional on the performance of residential and improvement conditions; these tenures are therefore included here with conditional purchases rather than with free grants.

Table III (page 548) shows the areas purchased conditionally in each State from 1914 to 1919.

In *New South Wales* during the year ended 30 June 1919, deeds of grant were prepared on the completion of conditional purchases for 559,779 acres, making the total number of conditional purchases in existence at the end of the financial year 36,203 for a total area of 19,435,807 acres. There were also 8 original and 12 additional homestead selections applied for, comprising an area of 17,266 acres, during the same period the total number of applications confirmed was 23, comprising 19,232 acres, and 3,092 homestead selections and grants, comprising an area of 985,914 acres,

TABLE III. — *Conditional Purchases, 1914-1919.*

Year	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Commonwealth
	acres	acres	acres	acres	acres	acres	acres
1911	67,511	155,681	1,227,771	36,186	698,850	11,181	2,527,209
1915	35,219	127,780	783,173	55,181	502,551	16,626	1,350,866
1916	23,552	130,665	502,165	16,008	308,590	38,529	858,807
1917	13,025	88,672	(a)	26,118	235,610	25,073	388,828
1918	16,211	73,977	(a)	17,963	516,575	26,120	661,146
1919	21,911	—	—	—	610,219	—	635,160

(a) During 1917 and 1918, no land was opened for selection, nor was any selected, under tenures involving freehold.

were in existence on 30 June 1919. This tenure is now practically superseded by the Homestead Farm Tenure.

In *Victoria* under the Murray settlements leases, 2 settlement areas have been laid out under the Act with due regard to irrigation conditions, viz, those at White Cliffs and at Nyah, and at the former place a dry farm area has also been subdivided. At White Cliffs 6,273 acres were subdivided as homestead allotments, and 50,345 acres as dry farm allotments, whilst at Nyah 1,960 acres were subdivided as homestead allotments. In April, 1918, an area was subdivided at Merbein West (irrigation conditions) and 36 allotments, comprising 571 acres, were allotted to discharged soldiers. A large proportion of the areas shown in the table has reverted to the Crown in consequence of non-fulfilment of conditions.

In *Queensland*, since the close of the year 1916, no selections can be acquired on a freeholding basis, but existing selections are not affected, though they can be converted to perpetual leases if the selectors so desire.

In *South Australia* the total area held on 30 June 1919 was 1,106,114 acres, of this area purchase has been completed of 471,722 acres, and 16,179 acres are held on perpetual right and right of purchase leases, allotted before the Pinnaroo Railway Act was passed.

§ 5. LEASES AND LICENCES.

Leases and licences are issued in all the States and in the Northern Territory for various terms and upon various conditions. In *Victoria*, *Queensland*, *South Australia*, and the *Northern Territory* perpetual leases are issued for an indefinite period upon payment of an annual rent, whilst in all the States leases or licences of comparatively large areas may be obtained for pastoral purposes. Also provision has been made in the States for convenient forms of leases and licences for various special purposes, such as artesian wells, dams, tanks, irrigation works, etc., and

for special classes of lands. The leases and licences dealt with below are exclusive of those issued under Closer Settlement and kindred Acts, and also of those for mining and auxiliary purposes.

Table IV shows the areas held under various descriptions of leases and licences in the States from 1914 to 1919:—

TABLE IV. — *Areas Occupied under Leases and Licences, 1914-1919.*

Year	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Northern Territory	Commonwealth
	acres	acres	acres	acres	acres	acres	acres	acres
1914 . . .	122,084,796	13,315,416	23,976,077	115,180,459	8,623,874	1,697,931	104,459,431	476,262,990
1915 . . .	121,565,558	13,035,612	30,102,433	114,419,941	7,869,934	1,777,190	113,926,627	481,432,180
1916 . . .	118,640,977	12,133,959	20,542,479	113,500,316	8,141,933	1,788,621	110,660,014	585,721,206
1917 . . .	117,015,319	11,383,810	216,305,674	119,189,189	9,891,557	1,516,461	104,102,423	580,637,176
1918 . . .	116,159,073	10,619,247	219,846,391	112,900,808	20,468,251	1,582,891	114,161,118	596,079,869
1919 . . .	115,110,607	—	—	—	39,665,763	—	112,218,206	277,191,176

In *New South Wales* on 30 June 1919, there were 56,932 leases and licences current under the Lands Department and the Western Land Board comprising 115,110,607 acres of Crown lands. Of these leases there were 54,040, comprising 39,867,280 acres, in the Eastern and Central Divisions; and 2,892, comprising 75,243,327 acres in the Western Division.

In *Queensland* the average rent in 1918 for grazing farms was .84*d.* per acre and for grazing homesteads 1.14*d.* per acre. The total number of licences in force at the end of 1918 was 2,443, comprising an area of 63,585 square miles, the total rent being £49,601. During 1918 there were 120 leases granted for special purposes, comprising an area of 15,620 acres, the total annual rent being £709, and there were extant at the end of the year 791 such leases, comprising an area of 55,668 acres and reserving rents amounting to £4,141 per annum. In addition, 53 leases of reserves, aggregating 12,341 acres, were granted at rentals amounting to £278 per annum, the total number of these leases of reserves in force at the end of the year being 379, comprising an area of 146,696 acres and reserving rents amounting to £1,598. The gross area held at the end of 1918 for purely pastoral purposes was 397,457 square miles, at rentals aggregating £366,603 per annum. The area had increased since 1917, by 2,909 square miles and the rental by £7,504. The average rent was 18*s.* 5 $\frac{1}{2}$ *d.* per square mile, as against 18*s.* 2 $\frac{1}{2}$ *d.* for the previous year. Six non-competitive perpetual leases were issued during 1918, the total area being 183 acres, and the rent £14 per annum.

In the *Northern Territory* on 31 December 1919 there were 607,690 acres held under leases and licences, and 4,689,920 acres held under permits.

§ 6. CLOSER SETTLEMENT.

In all the States, acts have been passed authorizing the Government to repurchase alienated lands for the purpose of cutting them up into blocks of suitable size and throwing them open to settlement on easy terms and conditions. Special acts have also been passed in several of the States authorizing the establishment on particular lines of co-operative communities, village settlements, and labour colonies. Lands may be acquired either compulsorily or voluntarily in New South Wales, Victoria, Queensland and Tasmania, but only voluntarily in South Australia and Western Australia.

Table V shows the total area acquired by the Governments of each State for the purpose of closer settlement from 1914 to 1919:

TABLE V. — *Closer Settlement, Area of Lands Acquired up to end of each year from 1914 to 1919.*

Year	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Commonwealth
1914	771,696	567,687	661,363	657,620	116,804	10,756	2,121,935
1915	774,696	567,993	664,363	666,299	116,804	12,940	3,133,085
1916	837,870	568,073	785,311	729,963	146,804	157	3,368,178
1917	830,200	571,953	785,311	743,191	146,804	1,939	3,388,398
1918	851,522	569,334	785,311	713,191	146,804	Nil	3,396,162
1919	895,620	570,617	—	—	116,804	Nil	1,913,041

The main question of Soldier Settlement enters into this section but is omitted here, for, as before stated, we intend to deal with the whole subject at an early date. In New South Wales, the Labour Settlements Act (1902) was repealed by the Bega and Wilberforce Labour Settlements Act 1917, which dissolved the Boards of Control, and provides for the settlers applying for the blocks they occupy as Homestead Farms, under the Crown Lands Consolidation Act 1913.

In *New South Wales* up to 30 June 1919, there had been opened 127 estates for settlement under the Closer Settlement Acts.

In *Victoria* up to 30 June 1919, there were also acquired under the Discharged Soldiers' Settlement Act 1917 (including Crown Lands and Closer Settlement Areas taken over), 182,550 acres, at a cost of £1,982,223. Applications granted numbered 995; and 144,788 acres were made available for farm allotments. Under the Small Improved Holdings Act 1906, which has been repealed, 2,822 acres close to towns where industrial employment could be obtained were purchased at a cost of £53,568 and al-

lotted to 260 settlers. On 30 June 1919 on land leased in Village Communities there were 346 settlers actually residing, and 146 not residing but improving.

In *Queensland* the total area opened for selection up to the end of 1918 was 641,363 acres, of which 595,719 acres had been selected by 2,220 selectors. There remained 45,644 acres unselected or reserved. The total amount of rent paid up to the same date was £ 1,309,454, the amount in arrear being £29,001. The 2,220 selectors held 2,338 agricultural farms, 252 unconditional selections, 73 perpetual lease selections and 5 prickly pear selections. In addition, land and improvements to the value of £86,641 had been sold at auction. The portions opened up for group settlement in 1918 numbered 341, totalling 110,620 acres. Up to the end of that year 295 portions, totalling 95,702 acres, and valued at £113,498 had been applied for by members of the bodies of settlers for whom they were opened. This part of the Land Act is operated almost exclusively in the settlement of returned soldiers.

In *South Australia* during the financial year 1918-19 one property of 5,497 acres was repurchased for closer settlement. The total area repurchased at 30 June 1919 was 748,689 acres, the purchase money being £2,469,478. Of that area 695,882 acres had been allotted to 2,757 persons, the average area being 252 acres. With regard to homestead blocks, the total number of leases and agreements of which purchase had been completed to 31 December 1918, was 2,381, comprising 35,781 acres, at a purchase price of £87,296, an average of £2 8s. 10d. per acre. The average area of the holdings was 15 acres.

In *Tasmania* up to 30 June 1919, there were 24 areas opened up for closer settlement.

§ 7. RESUMPTION BY CROWN OF ALIENATED LANDS.

Under various Acts, alienated lands may be compulsorily resumed by the Crown in the several states for certain purposes, generally connected with works of a public nature. In most of the States there are Land Clauses or similar Acts providing the machinery and indicating the procedure to be adopted in assessing the compensation to be paid by the Crown to private owners where the parties have failed to agree as to the amounts to be paid. The provisions of these Acts are generally incorporated in the special Acts specifying the purposes for which alienated lands may be resumed. Lands leased for pastoral purposes may generally be resumed by the Crown on short notice. The lessee is ordinarily entitled to compensation for land resumed, for loss or depreciation in value of the lease caused by such resumption, and for improvements.

Table VI shows the areas of private lands resumed, exclusive of resumptions for closer settlement purposes, in each State from 1914 to 1918:

TABLE VI. — *Areas of Private Lands resumed by the Crown, 1914 to 1918 (Exclusive of Resumptions for Closer Settlement).*

Year	New South Wales Acres	Victoria Acres	Queens- land Acres	South Australia Acres	Western Australia Acres	Tasmania Acres	Common- wealth Acres
1914	527	Not available	—	Not available	Not available	Not available	Not available
1915	1,997	»	84	»	»	492	»
1916 . .	1,619	»	401	»	»	Not available	»
1917 . . .	6,737	»	443(a)	»	»	»	»
1918 . . .	2,213	»	17,700	»	»	»	»

(a) Including 361 acres resumed for soldier settlement purposes. In addition there was resumed by various local authorities, 45 acres; and by the Water and Sewerage Board, 83 acres.

§ 8. CLASSIFICATION OF HOLDINGS ACCORDING TO SIZE.

The classification of holdings is of interest chiefly in relation to the efforts made by the several States in recent years to promote settlement on the land on blocks of suitable size, especially by means of the Closer Settlement Acts. Returns showing such a classification are not available for Queensland nor for the Northern Territory.

TABLE VII. — *Classification of Ho.*

State or Territory	1-50		50-100		100-500		500-1,000	
	No.	Acres	No.	Acres	No.	Acres	No.	A
New South Wales . . .	41,732	508,768	8,291	651,534	25,078	6,708,813	9,982	7,000
Victoria	20,866	370,126	8,036	572,349	26,246	6,517,118	11,221	7,700
South Australia . . .	7,201	115,933	1,810	110,163	5,953	1,693,439	4,050	2,900
Western Australia . .	3,533	43,910	607	51,150	2,965	801,781	3,310	2,600
Tasmania	4,636	74,920	2,363	163,830	5,196	1,077,900	793	500
Federal Territory . .	34	553	20	1,461	54	15,279	33	

Table VII gives a classification of the number and area of holdings, of one acre and over, in area series, as returned to the collectors of agricultural and pastoral statistics for all the States, excepting Queensland, and for the Federal Capital Territory, to the latest available date.

§ 9. TOTAL AREAS OF SETTLED LAND.

The effect of the land laws on the progress of settlement and the growth of land alienation has been generally to diminish the number of large holdings, at the same time restricting the area held under lease, while both the area alienated and the area in process of alienation have increased.

From 1901 to 1918 the area alienated absolutely in the whole Commonwealth increased by 30,950,556 acres, or 40 per cent.; the area in process of alienation increased by 20,612,459 acres, or 59 per cent.; the area leased, by 160,958,316 acres, or 22 per cent.; while the area unoccupied decreased by 212,521,331 acres, or 20 per cent.

In Table VIII is shown the total area alienated, in process of alienation, held under lease or license and unoccupied in the years 1901 and 1918. These are expressed absolutely and as percentages of the area of the entire state.

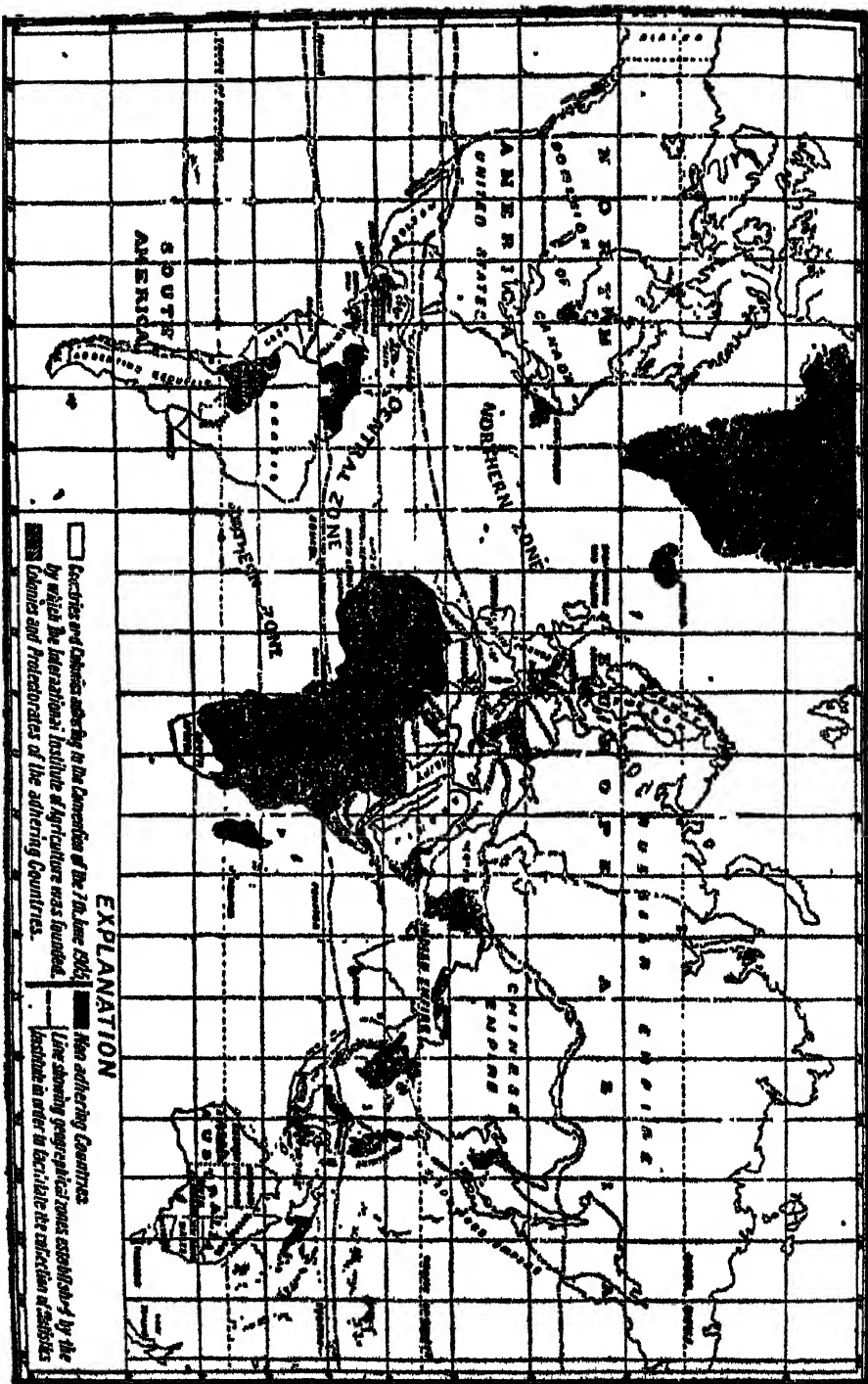
acre and over) in Area Series 1918-19.

100-5,000		5,000-10,000		10,000-20,000		20,000-50,000		50,000 and over		Total	
Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.
17,418,941	1,011	6,930,872	155	6,250,731	233	6,756,127	72	6,365,219	96,180	58,606,251	
10,117,530	290	1,996,606	117	1,621,160	35	1,016,847	—	—	72,670	20,976,151	
7,275,115	111	818,841	19	661,781	23	612,137	—	—	23,365	1,289,616	
8,280,286	263	1,811,892	95	1,338,251	27	756,192	4	323,000	14,056	16,107,338	
1,502,450	126	874,250	57	709,950	33	894,400	5	495,385	13,937	6,310,615	
83,541	9	57,567	4	54,014	4	130,931	—	—	204	368,438	

TABLE VIII — Total Area Alienated, in Process of Alienation, held under Lease or License and Unoccupied.

State or Territory.	Year (1)	Alienated		In process of alienation		Held under lease or licence		Occupied by the Crown or unoccupied (2)		Total area in acres
		Area in acres	Per cent.	Area in acres	Per cent.	Area in acres	Per cent.	Area in acres	Per cent.	
New South Wales (3)	1901	26,443,554	13.32	21,595,688	10.87	127,055,370	63.96	23,543,468	11.85	198,036,500
	1918	40,855,172	20.63	20,470,027	10.34	116,301,054	58.77	20,320,247	10.26	
Victoria	1901	20,066,875	35.67	3,730,351	6.63	17,110,709	30.42	15,337,825	27.28(4)	50,245,760
	1918	24,503,531	43.57	8,106,887	14.41	10,649,247	18.93	12,986,095	23.09(4)	
Queensland	1901	13,533,408	3.15	2,791,664	0.65	280,023,979	65.26	132,770,889	30.94	420,120,000
	1918	16,771,717	3.91	9,763,261	2.27	325,575,052	75.94	76,209,970	17.88	
South Australia.	1901	7,535,123	3.10	553,774	0.23	85,591,215	35.18	149,564,608	61.49	213,244,800
	1918	10,785,941	4.44	3,025,166	1.21	113,081,068	46.45	116,352,625	47.83	
Western Australia	1901	3,468,878	0.50	6,116,266	0.98	97,450,460	15.60	517,552,996	82.86	624,588,800
	1918	8,462,085	1.35	13,105,628	2.10	208,052,623	33.31	394,968,464	63.24	
Tasmania	1901	4,621,585	27.54	272,376	1.62	1,520,983	9.06	10,362,656	61.78	16,777,500
	1918	5,197,283	30.98	1,122,797	6.69	1,832,416	10.92	8,625,104	51.41	
Northern Territory	1901	473,278	0.14	—	—	112,654,288	33.62	221,989,234	66.24(5)	335,110,800
	1918	476,476	0.14	—	—	106,331,275	31.73	228,309,049	68.13(5)	
Commonwealth (6)	1901	76,142,761	4.00	35,060,119	1.84	721,407,284	37.89	1,071,121,676	56.27	1,603,711,540
	1918	107,093,317	5.63	55,672,578	2.92	882,365,600	46.35	858,600,345	45.10	

(1) 1901 to 31 December; 1918 to 30 June. — (2) Including roads and reserves. — (3) Exclusive of Commonwealth Territory — (4) Including Mines Department leases and licences. — (5) Including aboriginal reserves and mission stations — (6) Including Federal Territory, total area 601,580 acres. In 1918: alienated, 41,112 acres, 6.83%; in process of alienation, 70,812 acres, 13.20%; held under lease or license, 152,865 acres, 25.41%; occupied by the Crown or unoccupied, 327,791 acres, 51.96%.



INTERNATIONAL INSTITUTE OF AGRICULTURE
BUREAU OF ECONOMIC AND SOCIAL INTELLIGENCE

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THE INTERNATIONAL INSTITUTE OF AGRICULTURE

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The International Institute of Agriculture was established under the International Treaty of 7 June 1905, which was ratified by forty governments. Nineteen other governments have since adhered to the Institute.

It is a Government institution in which each country is represented by delegates. The Institute is composed of a General Assembly and a Permanent Committee.

The Institute, always confining its attention to the international aspect of the various questions concerned, shall :

(a) collect, study and publish as promptly as possible, statistical, technical, or economic information concerning farming, vegetable and animal products, trade in agricultural produce, and the prices prevailing in the various markets ;

(b) communicate the above information as soon as possible to those interested ;

(c) indicate the wages paid for farm work ;

(d) record new diseases of plants which may appear in any part of the world, showing the regions infected, the progress of the diseases, and if possible, any effective remedies ;

(e) study questions concerning agricultural co-operation, insurance and credit from every point of view ; collect and publish information which might prove of value in the various countries for the organization of agricultural co-operation, insurance and credit ;

(f) submit for the approval of the various governments, if necessary, measures for the protection of the common interests of farmers and for the improvement of their condition, utilizing for this purpose all available sources of information, such as resolutions passed by international or other agricultural congresses and societies, or by scientific and learned bodies, etc.

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PRINCIPAL WEIGHTS, MEASURES AND MONEY OF THE VARIOUS COUNTRIES AND THEIR BRITISH EQUIVALENTS

— — —

1 Cadastral arpent (Hungary)	=	1.42201	acres
1 Centimetre	=	0.393715	inches
1 Cho (60 ken) (Japan)	=	119.30327	yards
1 Crown 100 heller (Austria-Hungary)	=	10 d.	at par
1 Crown (100 ore) (Denmark, Norway, Sweden)	=	1s. 1 ¹ / ₂ d.	at par
1 Deciatine (2 tchetwert, Russia)	=	2.69966	acres
1 Dinar, gold (100 para) (Serbia)	=	933/64 d.	at par
1 Dollar, gold (\$) (100 cents) (United States)	=	4s. 5/16 d.	at par
1 Drachm, gold (100 lepta) (Greece)	=	933/64 d.	at par
1 Egyptian Kantar	=	99.0498	lbs.
1 Feddan Masri (24 Kirat Kamel) (Egypt)	=	1.03805	acres
1 Florin, gold, or Guilder (100 cents) (Netherlands)	=	1s. 7 ¹³ / ₆₄ d.	at par
1 Franc (100 centimes) (France)	=	9 ¹³ / ₆₄ d.	at par
1 Gramme	=	0.03527	oz.
1 Hectare	=	2.47109	acres
1 Kilogramme	=	2.2	lbs.
1 Kilometre	=	1093.613	yards
1 Kokou (10 To) (Japan)	=	1.58726	quarts
1 Lei, gold (100 bani) (Rumania)	=	9 ⁸³ / ₆₄ d.	at par
1 Leu (100 stotinki) (Bulgaria)	=	933/64 d.	at par
1 Lira (100 centesimi) (Italy)	=	933/64 d.	at par
1 Litre	=	{ 0.21998 0.0275	{ gallons bushels
1 Mark (100 Pfennige) (Germany)	=	11 ³ / ₄ d.	at par
1 Mark (100 penni) (Finland)	=	9 ¹³ / ₆₄ d.	at par
1 Metre	=	3.28084	feet
1 Milreis, gold (Brazil)	=	2s. 2 ⁶¹ / ₆₄ d.	at par
1 Milreis, gold (Portugal)	=	4s. 5 ¹⁹ / ₆₄ d.	at par
1 Peseta, gold (100 céntimos) (Spain)	=	9 ¹³ / ₆₄ d.	at par
1 Peso, gold (100 centavos) (Argentina)	=	3s. 11 ³⁷ / ₆₄ d.	at par
1 Pound, Turkish, gold (100 piastre) (Ottoman Empire)	=	18s. 0 ¹⁵ / ₆₄ d.	at par
1 Pund (Sweden)	=	0.93712	lbs.
1 Quintal	=	1.06843	cwt.
1 Rouble, gold (100 kopeks) (Russia)	=	2s. 1 ³ / ₈ d.	at par
1 Rupee (16 annas) (British India)	=	¹ / ₁₀ of £1	(gold)
1 Talar (20 piastre) (Egypt)	=	4s. 11 ¹¹ / ₃₂ d.	at par
1 Verst (Russia)	=	1166.64479	yards
1 Yen, gold 2 fun or 100 sen) (Japan)	=	2s. 0 ³⁷ / ₆₄ d.	at par
1 Zentner (Germany)	=	110.23171	lbs.

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Part I: Co-operation and Association

JAPAN.

THE DEVELOPMENT OF CO-OPERATION.

(*Continued*).

§ 4 CO-OPERATIVE CREDIT SOCIETIES.

(*Shinyō kumiai*).

The principal object of a co-operative credit society is to supply its members, in the form of loans, with the necessary capital for carrying on their occupations, and at the same time to facilitate saving.

Furthermore, a co-operative credit society may, at the same time, according to its particular constitution, lend money for the improvement of the economic conditions of its members.

The society may receive savings deposits also from persons belonging to the families of its members, from public corporations, from corporate bodies, from non-profit associations, etc.

The greater number of active co-operative societies is included in this category. In fact, at the end of 1919 the co-operative societies which were carrying on credit transactions, including those which were at the same time engaged in other business, were 87.6 per cent. of the whole number of existing co-operative societies.

We here give some particulars from which a general idea may be formed of the nature of the work done by co-operative credit societies.

The maximum amount of individual loans is fixed by the ordinary general meeting year by year. The same body also elects annually a committee of several persons (*shinyō-hyōtei-in*) to enquire into the position of every member, and to decide as to the amount of the loan, which of course, must not exceed the limit fixed by the general meeting.

At the end of 1918 the loans thus granted amounted to 91,700,000 yen, that is an average of 8,399 yen per society, and 62 yen per member. As a rule these loans are not guaranteed, and they represent about 80 per cent. of the total amount of all the loans.

The interest in the great majority of cases is fixed at from 9 to 10 per cent., which is lower by 1 or 2 per cent. than the ordinary local rate.

If a city (*shi*) or an urban district indicated by the Minister concerned, belongs to the area of operations of a co-operative credit society, that society has power, under certain conditions prescribed by its rules, to discount bills of exchange for members who require funds for carrying on their occupations or for the improvement of their economic condition. Such a society may also receive deposits from non-members. This branch of business belongs to a special kind of co-operative credit association known as an urban co-operative credit society (*shigachi-shinyō-kumiai*) which is carried on for the benefit of small tradesmen and artisans of urban districts. It practically performs the functions of a popular bank. At present there are in Japan 75 cities and 100 urban districts indicated by the authorities in which co-operative urban credit societies may be founded, and up to the present 80 urban credit societies have been formed.

At the end of 1918 these organizations had deposits to a total amount of 2,300,000 yen, and the loans, including the bills discounted, amounted to 2,700,000 yen.

This special kind of co-operative credit society is still in its initial stage of development, but it has increased rapidly, for the law which permitted its formation dates only from 1917.

The deposits made in the co-operative credit societies generally are usually of three kinds: deposits on current account, deposits for short terms, and deposits for long terms.

The amount of the deposits has increased rapidly during the last few years, rising at the end of 1918 to about 133,000,000 yen, that is, an average of 12,200 yen per society, and 94 yen per member. The usual rate of interest is 5 or 6 per cent. per annum.

In Tables XII to XV we give some statistics showing the development of the co-operative credit societies. In Table XII those co-operative societies which confine themselves to credit business are classified according to the form of liability of their members, and in Table XIII those which do other business besides credit business are similarly classified. The period to which the statistics relate is from 1911 to 1917.

TABLE XII. — *Co-operative Societies Confining themselves to Credit Transactions.*

Year	With limited liability	With unlimited liability	With guaranteed liability	Total	Percentage		
					With limited liability	With unlimited liability	With guaranteed liability
1911	1,169	1,321	44	2,534	46.1	52.1	1.8
1912	1,360	1,269	44	2,673	50.9	47.5	1.6
1913	1,478	1,246	43	2,767	53.4	45.0	1.6
1914	1,615	1,272	43	2,930	55.1	43.4	1.5
1915	1,712	1,259	44	3,015	56.7	41.8	1.5
1916	1,873	1,151	46	3,070	61.0	37.5	1.5
1917	1,960	1,085	47	3,092	63.4	35.1	1.5

TABLE XIII. — *Co-operative Credit Societies, including those which also carry on other business.*

Year	With limited liability	With unlimited liability	With guaranteed liability	Total	Percentage		
					With limited liability	With unlimited liability	With guaranteed liability
1911	3,761	2,618	154	6,566	57.3	10.3	2.4
1912	4,702	2,861	173	7,736	60.8	37.0	2.2
1913	5,383	2,965	182	8,530	63.1	31.8	2.1
1914	5,933	3,155	186	9,274	64.0	34.0	2.0
1915	6,305	3,211	180	9,738	64.7	33.3	2.0
1916	6,813	3,181	203	10,197	66.8	31.2	2.0
1917	7,156	3,120	214	10,490	68.2	29.8	2.0

Table XIV gives statistics relating to loan transactions carried out in 1917 by co-operative credit societies including those which were also carrying on other business.

TABLE XIV. — *Credit Transaction of Co-operative Credit Societies, including those which also Carry on Other Business.*

Loans	Number of co-operative societies furnishing returns	Total amount	Number of	Average per co-operative society	Average per loan
		yen		yen	yen
Loans granted	9,363	123,611,176	1,741,811	13,205,647	70,086
Loans repaid		67,290,182	866,550	7,186,850	77,653
Outstanding at end of 1917		56,353,991	875,261	6,018,797	61,385
Outstanding at end of 1916		52,210,172	820,900	5,776,457	63,612

Statistics of the savings deposits in the same societies for 1917 are given in Table XV.

TABLE XV. — *Savings Deposits in Co-operative Credit Societies, including those which also Carry on Other Business.*

Deposits	Number of co-operative societies furnishing returns	Amount	Number of depositors	Average amount per co-operative society	Average amount per depositor
		yen		yen	yen
Deposits paid in	9,363	105,995,887	—	11,420,718	—
Deposits withdrawn		62,325,681	—	6,656,503	—
In hand at end of 1917 . . .		13,670,205	910,300	1,661,125	46,138
In hand at end of 1916 . . .		29,599,159	810,032	3,271,213	11,862

§ 5. CO-OPERATIVE SOCIETIES FOR THE SALE OF PRODUCE.

(Hanbai-kumiai).

Co-operative societies for the sale of produce are formed with the object of selling articles produced by their members either manufactured or not, usually consigned to them by members. In some localities these articles are purchased by the members and sold without being consigned to the society. About 50 per cent. of the whole number of co-operative societies in Japan are societies carrying on this kind of transaction.

At the end of 1918 the yearly sums accruing from sales amounted to about 134,000,000 yen, that is an average of 22,383 yen per co-operative society and 179 yen per member. The products handled by the co-opera-

tive societies are very varied, but are principally rice, wheat, barley, soya beans, fresh vegetables, fruit, tea, colza oil, cocoons, raw silk, matting, straw and articles made of straw, live stock, textile fabrics, drapery goods, earthenware and porcelain, wood for burning and for building, coal, marine produce, sugar, paper, etc.

For this class also we give two tables, in which co-operative societies for the sale of produce are classified according to the form of liability of the members. Table XVI shows the co-operative societies confining themselves exclusively to the sale of produce, and Table XVII those which carry on other business as well.

TABLE XVI. — *Co-operative Societies
Confining themselves to the Sale of Produce.*

Year	With limited liability	With unlimited liability	Whit guaran- teed liability	Total	Percentage		
					with limited liability	with unlimited liability	with guaran- teed liability
1911	190	26	9	225	81.4	11.6	4.0
1912	180	29	11	220	81.8	13.2	5.0
1913	195	27	11	223	83.7	11.6	4.7
1914	188	25	11	224	83.9	11.2	4.9
1915	195	25	14	234	83.3	10.7	6.0
1916	190	19	12	221	86.0	8.6	5.4
1917	217	20	11	248	87.5	8.1	4.4

TABLE XVII. — *Co-operative Societies for the Sale of Produce
including those which also Carry on Other Business.*

Year	With limited liability	With unlimited liability	Whit guaran- teed liability	Total	Percentage		
					with limited liability	with unlimited liability	with guaran- teed liability
1911	2,360	1,036	99	3,495	67.5	29.7	2.8
1912	2,805	1,197	107	4,109	68.3	29.1	2.6
1913	3,148	1,272	117	4,537	69.4	28.0	2.6
1914	3,371	1,390	121	4,885	69.0	28.5	2.5
1915	3,536	1,148	127	5,111	69.2	28.3	2.5
1916	3,707	1,125	139	5,271	70.3	27.0	2.7
1917	3,967	1,435	145	5,547	71.5	25.9	2.6

The total value of the goods sold by co-operative societies for the sale of produce is given in Table XVIII which shows all the co-operative societies which sell produce, even if at the same time they carry on other business.

TABLE XVIII. — *Sales of Co-operative Societies for the Sale of Produce, including those which also Carry on Other Business.*

Year	Number of co-operative societies furnishing returns	Amount of sales	Average per co-operative society	Number of members	Average per member
		yen	yen		yen
1916	4,554	40,777,399	8,955,402	573,601	71,090
1917	4,672	59,090,177	12,647,726	604,977	97,673

§ 6. CO-OPERATIVE SOCIETIES FOR THE PURCHASE OF REQUISITES.

(*Kōbai-kumiai*).

The object of a co-operative society for the purchase of requisites is to buy articles necessary for carrying on industries, or for the daily consumption of its members, to whom it sells them either in the original state as purchased, or after a certain degree of manufacture.

This generic name is in fact given to two distinct kinds of co-operative society, viz, those which purchase raw materials or other requisites for agriculture and manufactures, and those which purchase articles for consumption. Since the co-operative societies of this class are for the most part found at present in agricultural districts, no distinction is as a rule made between the two kinds, and the raw materials and requisites for manufacture are purchased at the same time as articles required for daily consumption. The purchases are generally made as soon as the orders are received from the members, but sometimes shops are opened in which articles required by members are stocked and sold as needed.

The prices are in many cases 5 per cent. lower than the market prices; as a rule the sale is made for cash, but where old customs still exist payment is made half-yearly or at the end of the year.

There are nearly as many co-operative societies carrying on this kind of business as there are doing credit business, about 70 per cent. of all the co-operative societies in Japan.

The purchases made in 1918 amounted to 85,630,000 yen, that is an average of 10,240 yen per co-operative society, and 89 yen per member.

The chief articles purchased through these co-operative societies for manufactures and agriculture are fertilizers, agricultural implements, seeds and seedlings, eggs of silkworms, and implements for the silk industry, every kind of raw material for manufacture, tools and machin-

ery, fishing implements, etc. Among goods for daily consumption, we may mention rice, wheat, barley and other cereals, salt, silk, sugar, *sake*, macaroni, fish, coal, petroleum, textile fabrics, etc.

Tables XIX and XX show the development of co-operative societies for the purchase of requisites during the period 1911 to 1917. The societies are classified according to the form of liability adopted.

Table XIX gives the co-operative societies which carry on only the purchase of requisites, and Table XX all those which carry on this class of business including those which carry on other business as well.

TABLE XIX. — *Co-operative Societies
Confining themselves to the Purchase of Requisites.*

Year	With limited liability	With unlimited liability	With guaran- teed liability	Total	Percentage		
					with limited liability	with unlimited liability	with guaran- teed liability
1911	540	238	9	787	68.6	30.2	1.2
1912	488	177	8	673	72.5	26.3	1.2
1913	470	163	8	641	73.3	25.4	1.3
1914	154	140	5	599	75.8	23.4	0.8
1915	409	121	6	536	76.3	22.6	1.1
1916	366	76	6	448	81.7	17.0	1.3
1917	336	72	6	414	81.2	17.4	1.4

TABLE XX. — *Co-operative Societies for the Purchase of Requisites
including those which also Carry on Other Business.*

Year	With limited liability	With unlimited liability	With guaran- teed liability	Total	Percentage		
					with limited liability	with unlimited liability	with guaran- teed liability
1911	3,292	1,788	128	5,208	63.2	34.3	2.5
1912	3,968	1,972	146	6,086	65.2	32.4	2.4
1913	4,487	2,067	156	6,710	66.9	30.8	2.3
1914	4,883	2,199	162	7,244	67.4	30.4	2.2
1915	5,041	2,253	163	7,457	67.6	30.2	2.2
1916	5,292	2,191	178	7,661	69.1	28.6	2.3
1917	5,493	2,176	185	7,854	69.9	27.7	2.1

The amount of the purchases in the years 1916 and 1917 is shown in Table XXI, which refers both to co-operative societies which confine themselves to the purchase of requisites and to those which carry on other business as well.

TABLE XXI. — *Purchases of Co-operative Societies for the Purchase of Requisites, including those which also Carry on Other Business.*

Year	Number of co-operative societies furnishing returns	Purchases		Sales		Number of members	Average per member
		Total amount	Average amount per co-operative society	Total amount	Average amount per co-operative society		
		yen	yen	yen	yen		yen
1916	6,732	27,519,911	4,092,382	28,312,753	4,205,697	830,603	31,087
1917	6,863	32,865,072	4,793,104	33,811,181	4,927,070	865,917	39,050

§ 7. CO-OPERATIVE PRODUCTIVE SOCIETIES.

(*Seisan-kumiai*).

The object of co-operative productive societies is to manufacture to a certain extent the articles produced by their members, or to place at their disposal the plant and machinery necessary for their trade. This would include not only such material necessities as land or factory buildings but also men, as inspectors or technical experts in certain special branches of industry.

The requisites usually supplied to the members are, for instance, land, drying-rooms, warehouses and stores, traction engines, fishing implements, machinery for making ropes and matting, machinery for cleaning rice, for husking, etc.

Manufacturing, or the application of human skill, is largely carried on, and includes every kind of process from the simplest processes such as grading and bagging rice to the working of complicated systems such as those adopted for the manufacture of paper or sugar.

As an illustration we give a list of the chief processes carried on by this kind of co-operative society: bagging and grading rice and other cereals, treating and packing of raw silk, drying of cocoons, weaving, dyeing, cleaning of rice and other cereals, milling, paper making, sugar making, preparation of fish products, condensed milk, etc.

This is least numerous class of co-operative society in Japan, representing only 16 per cent. of the whole number. Manufacture and the utilization of plant, expressed in figures, would be only 1,160,000 yen at the end of 1918, an average of 584 yen per society, and about 5 yen per member.

The co-operative societies exclusively engaged in production are classified in Table XXII according to the form of liability adopted. In Table XXIII those co-operative societies which carry on other business as well as production are classified in the same manner.

TABLE XXII. — *Co-operative Societies Confining themselves to Production*

Year	With limited liability	With unlimited liability	With guaranteed liability	Total	Percentage		
					with limited liability	with unlimited liability	with guaranteed liability
1911	89	23	2	114	78.1	20.2	1.7
1912	96	20	1	117	82.1	17.1	0.8
1913	121	16	1	138	87.7	11.6	0.7
1914	125	17	2	143	87.4	11.9	0.7
1915	117	13	2	132	88.7	9.8	1.5
1916	117	15	2	134	87.3	11.2	1.5
1917	118	13	2	133	88.7	0.8	1.5

TABLE XXIII. — *Co-operative Productive Societies including those which also carry on other business.*

Year	With limited liability	With unlimited liability	With guaranteed liability	Total	Percentage		
					with limited liability	with unlimited liability	with guaranteed liability
1911	691	377	34	1,102	62.7	34.2	3.1
1912	837	408	35	1,280	65.4	31.9	2.7
1913	976	415	40	1,461	66.8	30.5	2.7
1914	1,082	473	44	1,599	67.7	29.6	2.7
1915	1,147	482	41	1,673	68.6	28.8	2.6
1916	1,244	461	50	1,755	70.9	26.3	2.8
1917	1,344	450	51	1,845	72.8	24.4	2.8

The amount of business done by co-operative productive societies is indicated by the payments to the societies for the manufacture of the goods of the members and for the use of the plant owned by the co-operative society. Table XXIV gives these figures for the years 1916 and 1917. In the number of co-operative societies furnishing returns are included those which, in addition to production, carry on other business at the same time.

TABLE XXIV. — *Payments to Co-operative Productive Societies (including those which also Carry on Other Business) for Manufacturing or for the Use of Plant.*

Year	Number of co-operative societies furnishing returns	Payments for manufacturing		Payments for the use of plant	
		Total	Average	Total	Average
		amount	per society	amount	per society
		yen	yen	yen	yen
1916. . . .	1,149	179,081	123,560	2,11,203	163,053
1917. . . .	1,502	277,731	181,908	288,113	192,019

§ 7. AGRICULTURAL STORAGE.

The Law of 20 July 1917, No. 15, defines agricultural storage as the preservation in special granaries or warehouses of cereals and cocoons produced directly by agriculturists, or representing the payment in kind of the rent of their land. This storage must not be for profit. In the warehouses other agricultural produce may be stored, but only if it cannot injure the cereals or cocoons. The organization which undertakes the storage besides preserving the produce, may not only carry on all the processes for the improvement and grading of the produce deposited and prepare it for sale, but also act as intermediary with regard to the sale, and grant loans on the guarantee of the deposit certificates ("warrants").

The administration of the agricultural warehouses must be exclusively in the hands of co-operative societies, agricultural societies, institutions of public utility having for their object the development of agriculture, cities, towns and villages (*shichōson*) and similar public bodies.

The State grants many advantages to those agricultural warehouses which were instituted in conformity with the law, and further a considerable sum is set apart in the budget of the Ministry of Agriculture and Commerce to assist the prefectures in paying the cost of subsidizing the establishment and working of agricultural warehouses.

After the Law of 1917 on Agricultural Storage had come into force, many co-operative societies opened granaries and warehouses for the pre-

servation of cereals and cocoons for agriculturists, also carrying on the other business contemplated by the law, such as the manufacture of the produce entrusted to them, the bagging, grading and transport of such articles, and acting also as sale agents, or in general as intermediaries, and lending money to agricultural communities on the guarantee of the warrants of the agricultural warehouses.

This branch of business, though of very recent date, seems likely to have a brilliant future, especially as in February 1920, a comparative short time after the Law came into force, there were already 564 co-operative societies carrying on the business of agricultural storage, and the total number of agricultural warehouses established in accordance with the Law was 666.

§ 8. FEDERATIONS.

We will now describe succinctly the position of the federations at the end of 1918.

At that time there were 100 federations, containing 5,956 co-operative societies. Their total capital amounted to 2,000,000 yen (of which 1,250,000 yen was paid up) and the aggregate reserve funds amounted to 540,000 yen; the loans granted amounted to 3,250,000 yen; the deposits to 11,000,000 yen. The total sum realized by the sales was 27,400,000 yen, and the purchases amounted to 4,200,000 yen. These figures, except the number of federations, are only approximate, but are taken from official estimates.

On an average there were 59 co-operative societies affiliated to each federation, the average capital per federation was 20,000 yen, of which 12,500 yen was paid up; the average reserve fund per federation was 5,400 yen. Taking account only of those federations which carry on the respective businesses the average amount of the loans granted was 42,000 yen; the average deposits, 136,800 yen; the average sales 548,700 yen; and the average purchases 71,000 yen.

The work of the federations is as yet only beginning, but they are developing with considerable rapidity. At the end of September 1920 there were 146 federations of co-operative societies.

§ 9. THE CENTRAL UNION OF CO-OPERATIVE SOCIETIES.

(Sanyō-kumiai-chūkwaï).

The Central Union was established with the object of organizing and developing co-operative societies and federations of co-operative societies, and of promoting close relations among them. It was founded in 1905 by Viscount Hirata.

In 1910 a law was passed regulating the constitution of this central organization, which was accordingly amended in conformity with the provisions of the law. The Central Union is a legally recognized body, formed of co-operative societies, federations of co-operative societies, and of individuals specially interested in the co-operative movement. There is only one Central Union with its head-quarters at Tôkyô.

At the end of September 1920, the members of the Union numbered 11,656, thus classified : 9,378 ordinary members (including 9,288 co-operative societies, and 90 federations of co-operative societies) and 2,278 associated members (individuals).

The Union has 46 branch offices throughout the country, each with the duty of promoting in its own neighbourhood the interests of co-operation and of fostering good relations among the existing co-operative societies.

The Central Union proposes to grant prizes and diplomas to those co-operative societies which can show the best results, to organize a series of propagandist lectures in favour of co-operation and of agricultural storage, to publish an official organ of co-operation and pamphlets for distribution, also to encourage the formation of new co-operative societies by various modes of propaganda, etc.

The Central Union acts also as an intermediary between local enterprises and the capital, makes profitable investments of the funds of associated co-operative societies, and by promoting the exchange of goods, facilitates their manifold labours. It seeks to establish close intercourse among individual societies, and urges upon the ministry concerned the importance of the extension and development of the co-operative movement.

The Central Union is under the direct supervision of the Ministry of Agriculture and Commerce.

In 1911 the Emperor of Japan, desiring to reward the great and meritorious work done by the Central Union was pleased to grant to it a sum of 20,000 yen, together with an official message of encouragement.

§ 10. CONCLUSION.

In conclusion we may say that the co-operative societies of Japan are organized in conformity with special provisions of the law, intended to bring into prominence the special characteristics which co-operative societies ought to have. These are :

1. Limitation of the amount which each member may invest in the co-operative society ;
2. Perfect equality among the members irrespective of the number of shares held by them ;
3. Limitation of dividends.

These conditions are made compulsory to prevent the society from assuming a speculative character, and to bring into greater prominence the principle of mutuality.

The result of these precautions has hitherto been satisfactory, because at present it seems that no society has assumed a capitalist character, but all are making healthy and natural progress.

Furthermore, considering that only a short time has passed since the law on co-operation came into force, and also that Japanese society in general is not quite prepared to receive new ideas with favour, the present results are very encouraging.

The importance of the work done seems, however, to offer a guarantee that the continual and tenacious efforts of the Japanese government will successfully conduct the system of co-operation to its full realization.

The foregoing study, based as it is on statistics and precise information, shows, moreover, the increasing diffusion of co-operative societies throughout the Empire, and the importance of their influence on the markets and on the economic life of the country; it also indicates the fact that the enormous development of all the economic, industrial and commercial activities of Japan, promoted by the world war, is reflected to a considerable extent in the co-operative movement, showing its full maturity and the possibility of an eventual extensive development, such as the altered condition of the prosperity of the country requires.

The great want of Japanese co-operation is a special institution of credit such as exists in other countries. This want is so strongly felt by Japanese co-operators that an active effort is being made for the creation of a central credit institution for co-operation. Many demands and proposals have been put forward by various co-operative congresses, and it seems that the Japanese government is taking the question into serious consideration (1).

MISCELLANEOUS INFORMATION RELATING TO CO-OPERATION AND ASSOCIATION.

BULGARIA.

THE CO-OPERATIVE SALE OF GRAIN. -- *L'Echo de Bulgarie*. Sophia 5, 18, 21, 26 July, 6 October 1921.

For the past two years the export of grain from Bulgaria has been monopolized for the benefit of a Consortium of co-operative societies and of syndicates formed solely of agricultural producers, known as the Co-operative Grain Consortium.

During its first years' working the Consortium had agencies managed exclusively by merchants. The handling of the grain was defective, in certain agencies the quality of the produce was so inferior that difficulties arose between the central management and the buyers. The quantities of grain delivered to the consortium during the year 1920 are shown in Table I (page 568).

The sale of these products enabled the Consortium to realise a profit of 138 millions of leva, which has been employed in the construction of great silos at Varna and Bourgas, and of sheds and grain warehouses at the Danubian ports, and at the great railway stations.

(1) By Imperial Decree of 3 August 1921, No. 371, the date on which the Law of 12 April 1921, No. 73, was to come into force was fixed as 10 August 1921. This Law amends the previous law on co-operation with which we dealt in the first part of this article, on page 409 of our issue of August-September 1921.

TABLE I. — *Grain Delivered to the Consortium in 1920.*

	Quantities delivered by syndicates and co-operative agri- cultural societies and by individual agriculturists	Quantities delivered by grain merchants
	hectolitres	hectolitres
Wheat.	11,750,381	6,242,431
Maize .	67,614,791	56,943,894
Rye. .	491,190	240,373
Barley	8,301,604	5,907,234
Oats .	243,054	185,122
Millet .	890,100	6,210,063

In its second year, the Consortium entrusted the management of the agencies to syndicates and co-operative societies of agriculturists. The following figures show the quantities of grain delivered by them in 1921.

TABLE II. — *Cereals Delivered to the Consortium in 1921.*

	Quantities delivered by the syndicates and co-operative agricultural societies and individual agriculturists	Quantities delivered by grain merchants
	hectolitres	hectolitres
Wheat.	23,916,721	302,112
Rye.	2,936,711	390,303
Barley	9,785,921	566,189
Oats	227,108	217,100
Maize	25,000,173	213,655
Millet	20,351	—
Kidney beans	1,852,909	86,807
Chick peas	1,238,048	375,690

The profits accruing from the sale of grain are estimated at 100 millions of leva, and amount to between 90 stotinki and 1 lev per kilogramme of wheat. Of these profits 60 per cent. go to the producers, 25 per cent. to a fund for the construction of elevators, 10 per cent. to syndical and co-operative education, and 5 per cent. to a fund for the encouragement of co-operative agricultural industry and of co-operative trade in grain.

The Government having decided to remove the monopoly, the State co-operative consortium was abolished by law, and it is now in process of liquidation. But a congress held by 44 regional agricultural syndicates on the 22, 23 and 24 September 1921 at Sophia, decided to form a new free co-operative consortium for the sale of agricultural produce.

This Consortium will have its head-quarters at Sophia but it will open agencies for exportation in various parts of the country. The necessary funds for its working will be supplied :

(1) by the liquidation of the old consortium, which will at once pay the different commissions due to syndicates and co-operative societies ;

(2) by the Co-operative Agricultural Bank, which is to make advances to the different societies trading in agricultural produce on the security of " warrants " ;

(3) by private individuals, banks and private companies which may even become members.

The Consortium will be managed by two representatives of the Central Syndicate and one from the General Union of Agricultural Co-operative Societies.

The profits will be thus divided : 75 per cent. to the producers, 5 per cent. to the Central Syndicate and to the General Union of Agricultural Co-operative Societies, 5 per cent. to the reserve fund of the Consortium, and 15 per cent. to the syndicates.

The creation of the free consortium is due to the initiative of the Agricultural Co-operative Bank.

This Bank, which had already played an important part in the working of the State Consortium, contains 3,735 private members. 46 syndicates, and 20 co-operative societies. Practically all the syndicates in Bulgaria are in connection with it. The paid up capital in May 1921 was 4,000,000 leva, the deposits amounted to 1,000,000 leva ; 35 per cent. of the profits are devoted to co-operative propaganda

FRANCE.

1. THE NATIONAL CONFEDERATION OF AGRICULTURAL ASSOCIATIONS. — *La France paysanne*, Paris, 14 August 1921.

The journal *La France paysanne* having undertaken to request the principal agricultural institutions of France to give a description of their working, M. J. Ponsard, administrative secretary of the National Confederation of Agricultural Associations (39 Rue d'Amsterdam, Paris, VIII) founded in 1919 immediately after the war, thus describes the object and work of this Confederation :

" The National Confédération of Agricultural Associations co-ordinates the work of the agricultural associations : it is the link which unites them ; it is the permanent bureau common to all, while each retains its complete autonomy and continues as before its fruitful labours with full freedom of action. Should any association wish to call the attention

of farmers to the desirability of solving a particular problem, or feel that it is not sufficiently powerful to secure the satisfaction of a demand of a general nature, it appeals through the Confederation for the collaboration and help of other associations. In its turn the Confederation, through its permanent secretariat, follows in the parliament and the administrative bodies all questions concerning agriculture, and calls the attention of its members to them. Then at the meetings of its general committee or of its federal bureau, the delegates from associations describe the results of their work, and agree together to secure unity of action, to take further steps, or to make necessary demands.

"Thus the National Confederation plays a twofold part as a centre of information and as a means of protecting the interests of farmers. But it will be seen at once that to render the services required of it, the Confederation must know as thoroughly and as rapidly as possible the opinion of all the agriculturists. It can therefore enter into direct relations only with large groups, which in their turn are in constant relation with their members whose desires and needs they are in a position to know.

"The Confederation is therefore solely formed by the union of national and regional associations. Thus it includes at present.

"(1) Societies and Unions, extending all over France, and dealing with all agricultural questions: the Society of French Agriculturists, the National Society for the Encouragement of Agriculture, the National Union of French Peasants, the Central Union of the Syndicates of the Agriculturists of France, the Central Syndicate of the Agriculturists of France, etc.

"(2) National organizations devoting their attention to one single branch of production: the National Horticultural Society of France, the National Federation of Agricultural Mutualty and Co-operation, the Syndicate of Agricultural Distillation, etc.

"(3) Regional Federations and Unions: the Federation of Agricultural Associations of the Centre, the Union of Agricultural Syndicates of the South East, etc.

"(4) Regional organizations devoting their attention to a special kind of cultivation: the General Confederation of Vine-growers, the Federation of the Vine-growers of Charente, etc.

"(5) Colonial groups: Union of the Agricultural Associations of Morocco, Confederation of Agriculturists of the Department of Algeria.

"In addition, besides its normal activity and its direct relations with its members, the National Confederation of Agricultural Associations organizes every year a general Congress of French Agriculture to which it invites all agricultural associations of every kind, important or unimportant. This vast meeting of the agricultural world, in which all opinions are expressed, makes known all its desires and requirements to the Confederation, which, from the resolutions passed, is enabled to evolve its course of action. Confederated action, which alone is permanent, afterwards develops under the impulse of the Bureau and of the Committee, who direct the President, the Vice-president and the General Secretary to carry out the decisions. It must be observed that these are only ap-

pointed for a short time, and are chosen by turns from among the various affiliated associations, but they are seconded, where necessary, by a Managing Committee formed of a few members, who can meet easily when some important action has to be taken rapidly. We may add that when, after enquiry and in its meetings, the necessary unity of opinion has been reached, the Confederation has intervened in regard to the great agricultural questions which have arisen since its foundation. On many occasions it has been consulted by the Government and parliamentary commissions have desired to hear its opinions. Great industrial and commercial organizations have also addressed themselves to the Confederation as soon as they knew of its existence.

* * *

2. THE DISTRIBUTION OF THE ADVANCES MADE IN FAVOUR OF CO-OPERATIVE AGRICULTURAL CREDIT. — *Journal Officiel*, 9 June 1921.

By the Law of 5 August 1920 on co-operative credit and agricultural co-operation, the yearly dues to be paid into the Treasury by the Bank of France were placed at the disposal of the Government to be handed over as advances to the regional credit banks. A Decree of 3 June 1921, published in the *Journal Officiel* of 9 June, fixed as follows the proportion in which these sums are to be distributed according to the nature of the advance :

- 5 twentieths for advances for short term loans ;
- 2 twentieths for advances for medium term loans ;
- 6.5 twentieths for advances for long term individual loans ;
- 6.5 twentieths for advances as loans to co-operative societies, to syndicates, or to other associations formed in the general interest of agriculturists.

TUNIS

THE NATIVE THRIFT SOCIETIES IN 1920 (1) COMPTE RENDU DES OPERATIONS DES SOCIÉTÉS INDIGÈNES DE PRÉVOYANCE EN 1920. TUNIS 1921

The receipts which increased the assets of the societies amounted in 1920 to 1,345,534.36 francs, and, after deduction of the State advances to be repaid (577,081.44 francs) to 768,452.92 francs.

This amount, though including the additional centimes on the new imposition of the tax on cattle, amounting to 118,181.95 francs, is lower than the corresponding amounts for the years 1918 and 1919, which were respectively 931,387.21 francs and 895,025.93 francs. The diminution is chiefly owing to the difference in the amount of the additional centimes in the *achour* tax (tax on crops) which fell from 308,055.69 francs in 1919 to 194,837.95 francs in 1920. The cereal crop in 1920 was indeed disastrous, so much so that the Government was compelled to import large quantities of seed barley, and of maize for consumption. It was therefore not

(1) For the work of these societies during the year 1919 see our issue of March 1921, page 112.

without real difficulty that the Government was able to put the native thrift societies in a position to grant to their members the loans of which they were in urgent need for seed and for subsistence. For wheat the sowing was assured by the distribution of all that could be bought in the market, as well as that which had been stored by the members who received foreign wheat in exchange. For barley, the requisition having procured only about 10,000 quintals, it was necessary to obtain the remainder in countries enjoying a climate similar to that of Tunis. After many efforts, the Government succeeded in obtaining 30,000 quintals from Morocco, and an equal quantity from Cyrenaica. Thus about 70,000 quintals of wheat and nearly the same quantity of barley were distributed. For loans for subsistence it was necessary to have recourse to maize and its derivatives; of these nearly 100,000 quintals were distributed.

As in previous years the societies also placed at the disposal of their members the amount of superphosphates, potatoes and seed chick-peas which they required.

These various loans for seed and for subsistence represented an approximate expenditure of 25 millions francs, of which 15 millions were for seed and 10 millions for subsistence. The assets of the societies being insufficient to meet such an expenditure, it was necessary to appeal to the State for a contribution. But the transactions were greatly facilitated by the balance at the disposal of the societies, which exceeded 7 millions. The harvest of 1921, generally favourable throughout the country, will permit the societies to recover, within the year, the greater part of their loans for seed, and thus to reconstitute their reserves after having repaid the advances made by the State.

Of the loans for subsistence part will be repaid by the borrowers, but an important fraction for the aged, the infirm, or the poor, must be regarded as irrecoverable. In accordance with precedent, this part must remain at the charge of the State. The resultant outlay is included in the estimates of the deficit of the harvest of 1920.

The insurance organized by the Decree of 31 March 1919 has permitted the distribution of a total sum of 187,501.25 francs among 1,650 cultivators, belonging to eleven different caïdats, who had suffered loss. These payments absorbed the contributions of the year. The results of the season of 1920 were more favourable. The losses declared only reached the sum of 87,878 francs out of 164,819.11 francs of contributions, thus leaving a reserve of 76,941.11 francs to be added to the contributions of 1921, to constitute the insurance fund of that year.

Lastly, the mortgage loans, suspended during the war, have been resumed. Although the accounts of 1920 as yet show only one new loan of 12,493.45 francs yet, in fact, from 1 January 1920 up to the present time 57 loans for a total sum of 356,955 francs have been granted.

With their assets amounting to 11,557,566.31 francs on 31 December 1920, and with the experience acquired the native thrift societies form a powerful instrument to check usury in all its forms.

Part II: Insurance and Thrift

MISCELLANEOUS INFORMATION RELATING TO INSURANCE AND THRIFT.

HOLLAND.

1. BILL FOR INSURANCE AGAINST ACCIDENTS IN AGRICULTURAL LABOUR. — *Maandschrift van het Central Bureau voor de Statistiek (Monthly Review of the Central Office of Statistics)* 16th year, 8th number, 31 August 1911, pages 1229-1230. *Nieuwe Rotterdamse Courant*, 6 August 1911, morning edition.

The Dutch law respecting labour accidents, promulgated in 1901, and considerably amended in 1921, does not apply to agricultural labourers. A bill intended to supply this want, proposed for the first time in 1905, corrected, and twice placed on the agenda, has now been definitely withdrawn, and replaced by an entirely new bill.

Owing to the continued success of several mutual insurance societies founded about 1910, among others the *Centrale Landbouw-Onderlinge* to which we referred in our issues of March 1914 and October 1921, the Minister has resolved to make them the basis of a new system, on condition that their rules shall be previously submitted to him. An employer will be only obliged to insure his workmen in the State Insurance Fund, in the case of his not being registered in one of these mutual societies. Consequently the most interesting part of the bill is that which regulates the work of private associations.

As these are working well and satisfying both employers and workers, their liberty has been restricted as little as possible. In general the government has merely secured to itself certain guarantees. Private societies have no right to make profits. Their members must be personally liable for the common debts, for a year after their resignation of membership. A society which does not make this a condition must deposit in the State Fund a certain sum as a guarantee of each temporary compensation. The compensation must not be fixed at sums lower than those to be paid by the State Fund. For life annuities the guarantees are compulsory, even for companies whose members are personally liable. Every employer must inform the central administration of the character of his undertaking, and of the accidents which have occurred. To avoid one-sided decisions, the Minister compels the societies to take half the number of their directors from among the agricultural labourers. These labour members will be

chosen by the Minister from a list drawn up by workmen's societies selected by the minister. A mixed council of employers and workmen will supervise the management of private companies.

As the same man is sometimes by turns a paid workman and an independent employer, and as his wages may vary from week to week, the temporary compensation will not be according to the wages received by the insured person at the time of the accident but according to the average weekly wages of the class to which he belongs.

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2. MUTUAL LIVE STOCK INSURANCE IN 1919 (1) — VERSLAGEN EN MIDDDELINGEN VAN DE DIRECTIE VAN DEN LANDBOUW (*Reports and Communications of the Agricultural Department*), 1921, No. 3. The Hague, 1921

The position of mutual live stock insurance societies in 1919 is shown in the tables on pages 575 and 576.

Comparing it with the position in the year 1916, it may be noted that between 1916 and 1919 the number of societies insuring horses increased from 538 to 562, while their membership increased from 57,516 to 67,591. The total number of horses insured increased from 104,494 to 131,147; the average number of horses insured per member increased from 1.8 to 1.9.

The societies insuring cattle increased from 882 to 919 and their membership from 90,319 to 93,024. On the other hand the number of head of cattle insured fell from 403,059 to 379,082 and the average per member from 4.5 to 4.1. This results from the general decrease in the number of cattle. While in June 1910 there were 2,026,943 head of cattle in Holland, in March 1919 there were only 1,968,609 head.

The insurance of pigs shows a marked decline. It is true that the number of societies insuring pigs rose from 114 to 122, but the number of members fell from 12,273 to 10,207, and the number of pigs insured from 31,886 to 12,661, a diminution of more than 60 per cent. Here again the decline corresponds to a diminution in the number of pigs, which fell from 1,259,844 in June 1910 to 449,825 in March 1919.

As to the mutual insurance of sheep and goats, it remains insignificant, only one tenth of the goats in Holland being so insured, although their number has fallen considerably since 1914.

(1) See our issue of June-July 1919, pages 372 to 376.

Provinces		Number of societies which furnished returns	Membership	Number of animals insured	Estimated value of animals insured	Number of animals in respect of which compensation was paid	Total amount of compensation paid	Average number of animals insured per member	Number of animals in respect of which compensation was paid per 100 animals insured	Amount of compensation paid per 100 florins of estimated value of animals insured
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(a) *Horses*

				florins		florins				
Groningen . .	42	4,784	15,583	10,365,783	409	177,637	3.4	2.6	1.71	
Friesland . . .	20	7,339	15,724	10,495,178	167	178,170	2.1	3.0	1.70	
Drenthe . . .	57	7,557	13,934	8,940,641	427	167,866	1.8	3.1	1.88	
Over-Yssel . .	58	9,125	12,886	5,085,117	391	124,343	1.1	3.0	2.44	
Guelders . .	65	8,290	13,664	7,010,352	399	154,520	1.6	2.0	2.21	
Utrecht . . .	4	1,488	2,931	2,723,845	136	61,422	2.0	4.6	2.36	
North Holland	17	3,388	5,790	3,411,992	219	94,119	1.7	4.3	2.73	
South Holland	6	553	1,711	1,458,335	87	50,446	3.1	5.1	3.46	
Zealand . . .	20	3,023	14,411	12,810,632	500	276,818	1.8	3.5	2.16	
North Brabant	140	15,583	24,538	15,919,737	629	304,450	1.6	2.6	1.91	
Limbourg . .	103	6,461	9,942	8,101,446	333	165,962	1.5	3.3	2.05	
Holland . . .	502	67,591	131,117	86,302,060	4,027	1,759,085	1.0	3.0	2.04	

(b) *Cattle.*

Groningen . .	45	5,278	16,135	5,933,158	317	81,934	3.1	2.1	1.38
Friesland . .	42	5,663	27,339	8,550,585	712	141,697	4.8	2.7	1.66
Drenthe . . .	63	9,271	46,141	12,900,080	1,004	103,148	5.0	2.2	1.20
Over-Yssel . .	90	10,900	39,935	8,757,168	806	140,478	3.7	2.0	1.60
Guelders . .	204	21,218	62,159	13,660,763	1,169	258,950	2.0	2.3	1.89
Utrecht . . .	7	1,312	5,516	1,544,140	278	40,555	4.2	5.0	2.69
North Holland	73	6,400	58,635	—	953	218,028	9.2	1.6	—
South Holland	9	1,351	7,523	3,368,579	252	62,983	5.6	3.3	1.87
Zealand . . .	13	1,162	7,916	—	204	32,068	6.8	2.6	—
North Brabant	199	17,372	68,038	—	1,380	—	3.9	2.0	—
Limbourg . .	165	13,097	39,445	—	852	—	3.0	2.2	—
Holland . . .	919	93,024	379,082	—	8,287	—	4.1	2.2	—

(c) *Pigs*

Provinces	Number of societies which furnished returns	Membership	Number of animals insured	Number of animals in respect of which compensation was paid	Total amount of compensation paid
					florins
Overijssel	1	998	889	18	1 845
Gelders	38	2 942	1 755	270	7 960
Utrecht	2	76	45	1	10
South Holland	—	11	46	3	51
Zealand	50	4 910	1 081	163	5 304
North Brabant	1	1 139	1 710	95	2,788
Limbourg	2	152	235	18	526
Holland	122	10 267	12 661	618	18 502

(d) *Sheep and Goats*

(a) Insurance of sheep only, (b) insurance of both sheep and goats, (c) insurance of goats only

Provinces	Number of societies which furnished returns	Animals insured		Number of members	Number of animals in respect of which compensation was paid		Total amount of compensation paid	
		Sheep	Goats		Sheep	Goats		
							florins	
Friesland	a	9	1,025	—	723	39	—	1 121
	b	3	139	273	273	5	19	51
Holland	a	22	2,055	—	1 183	89	—	— 689
	b	10	167	565	583	23	71	1 896
Drenthe	a	3	317	—	216	18	—	521
	b	11	285	715	516	20	85	1,970
Overijssel	a	5	—	525	359	—	65	1 309
	b	1	20	—	17	2	—	16
Gelders	a	8	196	735	519	11	93	1 089
	b	12	—	1,418	939	—	131	1,923
Utrecht	a	22	—	2,085	1 311	—	238	3,136
Zealand	a	2	—	114	66	—	20	356
North Brabant	a	2	—	95	73	—	11	130
	b	2	1	136	94	—	18	174
Limbourg	a	14	—	1 496	925	—	141	1,773
	b	7	—	1 171	687	—	142	2,699
Holland	a	35	3,447	—	2,139	148	—	4,676
	b	34	991	2,452	2,015	62	280	6 571
	c	64	—	6,931	4,360	—	718	11,128

ITALY

MUTUAL LIVESTOCK INSURANCE IN THE TRENTINO. — FEDERAZIONE PROVINCIALE DELLE MUTUE BESTIAME DELLA VENEZIA TRIDENTINA. RELAZIONE DI RENDICONTO PER IL 2° ANNO AMMINISTRATIVO (1° NOVEMBRE 1910-31 OTTOBRE 1920) Trent, 1921

Insurance against loss through mortality in live stock was originally carried on in the Trentino by mutual societies governed by imperfect rules and working on the levy system.

In 1897 arose the first three societies with rules regularly approved. In the meantime the Provincial Council of Agriculture at Trent was drawing up a plan for forming in every judicial district an association to be managed by a veterinary surgeon who was not only to attend to the animals, but to encourage the adoption of sound rules for the rational breeding of live stock. The association was to pay 90 per cent. in case of loss, to give medicine gratis and to subject animals to one or two valuations annually. Some societies founded on these lines in 1899 did not, however, produce the desired results; indeed, because the too extended sphere of operations only permitted of slight supervision or because the members, considering that in case of loss they could realize 90 per cent., thought it more to their interest that their animals should die rather than remain long under treatment even if the cure was certain, the expenses continually increased, and the premium instead of remaining stationary at about 1 per cent, rose from year to year until in about six years it amounted to 1.80 and even 2 per cent.

Notwithstanding this, in 1900 the District Agricultural Consortium of Riva founded a society for that district, and others were formed immediately afterwards in 9 other localities, under the name of Catholic Live Stock Insurance Societies.

The difficulties encountered by these early societies brought to light a series of mistakes to be corrected; it became evident that with societies covering large areas it was impossible to exercise efficient control, that giving too many facilitations to members increased expenses inordinately, and that the annual premium, no longer within the desired limits, was becoming too burdensome. Therefore the Provincial Council in the light of the experience acquired, drew up in 1903 a very simple set of model rules and proposed that societies should be constituted in every commune where there were at least 25 members, with 100 animals to be insured. The premium is 1 per cent. per annum, to be paid in advance in two half-yearly instalments: the society pays 80 per cent. in case of loss, and leaves to the member the expense of the care of sick animals. The Provincial Council places the necessary forms and printed matter at the disposal of the societies and grants to every society a sum for its preliminary expenses. The societies may re-insure in the Provincial Re-insurance Institute, which, if desired, will keep the accounts of the societies affiliated to it, and, in consideration of receiving half the annual premiums fixed by the rules, will

pay half the compensation for loss, less the sum realized by the sale of injured or slaughtered animals

In 1904 about 15 societies had been formed according to the proposed system. In 1905-1906, 12 more were formed; each year new societies were formed and all worked so excellently that several succeeded in realizing considerable savings.

Some particulars as to the development of this important branch of mutual insurance may be drawn from the report on the second year's work (1 November 1919 to 31 October 1920) of the Federation of Mutual Live Stock Insurance Societies of the Trentino.

The work of the Federation in 1919-20 was chiefly propaganda, not specially aiming at the immediate formation of individual local societies, but rather at the preparation of the whole district for live stock insurance on a wide basis and on rational lines. As is well known the war destroyed a large percentage of the cattle which were to a great extent replaced by horses, the numbers of which have increased so much that the Federation has been induced to undertake their insurance.

In the Trentino horses, mules, and asses, which before the war numbered about 9,800, were at the end of the war reduced to quite an insignificant number, but on 1 November 1919 they had risen to 8,281; on 30 April 1920 to 9,909, and on 31 December following to 11,007. The Federation then asked and obtained from the provincial administration permission to extend its action to the insurance of horses, mules and asses.

Another of its important tasks was the compilation of rules for local mutual cattle insurance societies and for the Federation itself, to replace those previously in force, which had become unsuitable by the lapse of time.

A census of cattle was frequently made by the Federation in order to ascertain where its work was most needed, and to keep in view the increase in the number of cattle in the various districts

According to calculations the increase of head of cattle in the Trentino and Ampezzano, from the end of the war to 31 December 1920 was about 42,583, partly owing to the help given by the authorities (Provincial Council of Agriculture) partly through private importation and above all through breeding in the districts themselves.

In Upper Adige the increase of cattle from the end of the war (80,400 head) to 31 December 1920 (100,715 head) amounted to 20,315 head, but there is reason to think that the figures obtained by the census are inferior to the real number. It is evident that the rapid increase in the number of cattle will not fail to have a perceptible effect on the extension of cattle insurance.

The number of societies affiliated to the Federation on 31 October 1920 was 63, of which 48 belonged to the Trentino and 15 to the Upper Adige. In the first half of the insurance year the societies were 49, with 2,349 members, 5,232 animals, and an assured capital of 7,658,070 lire; in the second half the number of societies rose to 63, with 3,354 members, 7,704 animals, and an assured capital of 17,013,810 lire.

According to the result of inquiries, the number of cattle in the pro-

vince on 31 October 1920 was about 180,000, from which must be subtracted about 10,000 as being under the age of 3 months, and therefore not admitted to insurance; thus in the year 1919-1920 4.53 per cent of the cattle in the country were insured in local mutual societies, and re-insured in the Federation.

The average value of insurance per head amounted in the second half year to 2,208.44 liras.

On an average a local society contained 53 members with 122 animals.

The net amount realized by the utilization of the carcasses of dead animals, was 35.34 per cent of the compensation, the highest percentage reached since 1907 (the beginning of provincial cattle insurance). The increase of this amount reduced the compensation paid; thus while in 1918-19 (in which the amount realized was 21.79 per cent.) the net compensation amounted to 2.16 per cent of the average capital assured, and in 1919 it fell to 1.57 per cent.

In the year 1919-1920 in 63 re-insured mutual societies there were 210 losses, while in the previous year the number of losses was 271, with 36 insured societies.

The total amount of compensation paid was 332,637.60 liras; of this sum 35.34 per cent. were covered by the amount realized by the utilization of the carcasses (117,537.96 liras) while 64.66 per cent. (net compensation), equal to 215,099.64 liras, was paid by the Federation to the societies.

The largest number of losses occurred in the summer months. Of 210 animals in respect of which compensation was paid, 140 (66.67 per cent.) had to be slaughtered, and 70 (33.33 per cent.) died from various diseases. The net amount realized by the utilization of the carcasses was 117,537.96 liras, of which 31,434.94 liras were in respect of the 70 animals which had died, and 86,103.02 liras in respect of the 140 animals compulsorily slaughtered. The average amount thus realized was 449.07 liras for every animal that died, and 651.02 liras for every animal slaughtered.

The management expenses of the mutual cattle insurance societies was 12,492.54 and the cost of the treatment of the animals and for veterinary attendance was 5,353.56 liras.

The mutual horse insurance societies which had adopted the model rules and were affiliated to the Federation were four in number in 1919-20, with 242 members, 298 horses and an assured capital of 635,985 liras. The losses were three, the compensation paid amounted to 5,520 liras, the net amount realized by the utilization of the carcasses was 1,257 liras; the net compensation was 4,263 liras, representing 0.67 per cent of the average assured capital.

It is stated that at the date of the publication of the report from which these particulars have been extracted, the number of mutual cattle insurance societies re-insured with the Federation was 90 and the number of mutual horse insurance societies re-insured was eight. It may therefore be concluded that the system of working adopted by the Federation, and the active propaganda it has carried on, have given the best results.

SPAIN

THE MUTUAL HAIL INSURANCE SOCIETY OF THE FARMERS' ASSOCIATION OF SPAIN IN 1920 — MEMORIA DE NUESTRA CAJA DE SEGUROS MUTUOS CONTRA EL PEDRIZCO EN SU CUARTO EJERCICIO SOCIAL AÑO 1920 — *Boletín de la Asociación de los Agricultores de España*, No 113. Madrid, June 1921

The following are a few particulars of the business done by the Mutual Hail Insurance Society of the Farmers' Association of Spain during 1920, the fourth year of its existence.

In that year the proposals for new insurances were 1,442 in number, and of these 1,425 were accepted. If we add to these the policies of the preceding years, 1,743 in number, which were still in force, we have a total of 3,168 policies.

In 1919 there were 1,141 proposals. Of these 1,093 were accepted which, added to 685 of the preceding year still in force, made a total of 1,779 policies. At the end of the year there was thus an increase of 1,389 policies, over those of the preceding year.

The values assured in 1920 amounted to 19,434,158.95 pesetas, of which 12,107,965.37 pesetas were assured by policies previously taken out and 7,326,193.58 by new policies; while in 1919 the values assured amounted to 11,216,574.43 pesetas of which 4,708,959.97 pesetas was assured by policies taken out in previous years and 6,507,614.46 by new policies.

The following table shows the progress made by the Mutual Hail Insurance Society during the four years of its working existence.

Years	Policies	Values assured pesetas
1917	63	1,092,147.82
1918	622	5,316,108.42
1919	1,141	11,216,574.43
1920	1,425	19,434,158.95

With the considerable increase in the number of policies issued by the Society in 1920 there was a corresponding increase in its area of operations. In fact, while in the preceding year the work of the Society was confined to twenty-four provinces, viz. Alava, Alicante, Albacete, Barcelona, Badajos, Baleares, Ciudad Real, Cuença, Gerona, Guadalajara, Huesca, Jaen, Lerida, Logroño, Madrid, Murcia, Salamanca, Soria, Tarragona, Teruel, Toledo, Valencia, and Saragozza, in the year 1920 it extended to thirty provinces, enlarging its sphere of action to include the provinces of Burgos, Leon, Navarre, Palencia, Valladolid and Zamora.

The number of claims in 1920 was 1,297. These were, however, in respect of only 997 policies, as in some cases more than one claim was made in respect of crops covered by a single policy.

In consequence of irregularities, damages were assessed in respect of only 978 policies. The total amount of the assessed damage was 596,592.46 pesetas.

Of this sum 17,427.93 pesetas was in respect of policies issued in 1917 ; 211,956.27 pesetas in respect of policies issued in 1918 ; 150,656.70 pesetas in respect of policies issued in 1919 and 216,551.57 pesetas in respect of policies issued in 1920.

The Society had taken out a re-insurance policy with the *Mutualidad Nacional del Seguro Agro-pecuario*, covering 50 per cent. of the risks. Compensation to the amount of half of the damages assessed was accordingly paid by the *Mutualidad Nacional*, but the funds at the disposal of the Society were not sufficient to enable the remainder to be paid in full. The compensation actually paid was 17,427.93 pesetas in respect of policies issued in 1917 ; 304,594.90 pesetas in respect of policies issued in 1918 and 1919, and 168,875.24 in respect of policies issued in 1920.

Thus while the damages assessed were fully compensated for policies issued in 1917, the compensation paid only amounted to 84 per cent. of the damages in respect of policies issued in 1918 and 1919 and to 78 per cent of the damages in respect of policies issued in 1920.

Part III: Credit

ITALY.

THE AGRICULTURAL CREDIT PROVIDED BY THE BANK OF NAPLES AND THE BANK OF SICILY.

SOURCES :

BANCO DI NAPOLI. CASSA DI RISPARMIO. CREDITO AGRARIO. RELAZIONE SULL'ESERCIZIO 1920. CONSIGLIO GENERALE DEL BANCO DI SICILIA. SESSIONI ORDINARIE DEL 1921. RENDICONTO E BILANCIO CONSUNTIVO SUL SERVIZIO DEL CREDITO AGRARIO. Esercizio 1920. Palermo, 1921.

LEGGE 29 MARZO 1906, N. 100, CHE ISTITUI' PRESSO IL BANCO DI SICILIA UNA SEZIONE PER L'ESERCIZIO DEL CREDITO AGRARIO. *Gazzetta Ufficiale del Regno d'Italia*, No. 85. Rome, 11 April 1906.

REGIO DECRETO 7 GIUGNO 1920, N. 775, CHE INTENDE E DISCIPLINA LE FUNZIONI DELLA SEZIONE DI CREDITO AGRARIO DEL BANCO DI SICILIA. *Gazzetta Ufficiale del Regno d'Italia*, No. 144. Rome, 19 June 1920.

REGIO DECRETO 19 SETTEMBRE 1920, N. 1418 CHE APPROVA IL REGOLAMENTO PER IL FUNZIONAMENTO DELLA SEZIONE PREDETTA. *Gazzetta Ufficiale del Regno d'Italia*, No. 245. Rome, 16 October 1920.

§ 1. THE AGRICULTURAL CREDIT FURNISHED BY THE SAVINGS BANK OF THE BANK OF NAPLES.

In 1920, as in the four preceding years, the Savings Bank of the Bank of Naples had at its disposal, for its agricultural credit transactions, besides its own deposits and the capital of the Provincial Banks administered by it in eleven provinces of Southern Italy, the funds allocated by the State for increasing the cultivation of food-stuffs (Decrees of 20 July 1919, No. 1,414, and of 13 March 1920, No. 421, for the agricultural year 1919-20, and Decrees of 30 September 1920, No. 1,342, and of 10 November 1920, No. 1,636, for the agricultural year 1920-21). Consequently again in 1920 the operations were divided into two classes: *ordinary* agricultural credit and *extraordinary* agricultural credit.

It must be premised that both the Law of 7 July 1901, No. 334, which authorized the Savings Bank of the Bank of Naples to utilize two tenths of its deposits in agricultural credit transactions in the provinces on the mainland of Southern Italy and in the Island of Sardinia, and the Law of 2 February 1911, No. 70, which entrusted to the Bank itself the management of the Provincial Agricultural Credit Banks in eleven of those

(1) See also Article 8 of the Law of 2 February 1911, No 70.

provinces, provided that the credit was not to be furnished directly to the farmers but through the medium of local institutions, known as intermediary bodies, which knowing more intimately the applicants for loans and the local circumstances, could also watch over the effective application of the sums advanced. Only in certain cases determined by Article 6 of the Law of 29 March 1906, No. 100 (1) can loans be directly granted, that is in cases in which there is no intermediary body or the existing body is inactive or does not inspire confidence.

On 31 December 1920 the institutions capable of acting usefully as intermediary bodies numbered 1,258 and were thus classified: Agricultural co-operative consortia (including co-operative dairies, co-operative distilleries, co-operative vine-growers' societies, co-operative land-holding societies, etc.), 135; co-operative agricultural and rural banks, 537; agricultural loan banks, which have replaced the old *monti frumentari*, 117; *monti frumentari*, not converted into loan banks, 5; agricultural credit societies, 9, Sardinian *Monti frumentari*, 288; mutual aid societies, 7, popular banks, 139; savings banks, 15; independent provincial agricultural credit banks, established by special laws, 6, of which three are in Calabria, one is in Basilicata and 2 are in Sardinia. The intermediary bodies inscribed in the *casellatello agricolo*, that is in whose favour credits had been opened by the Bank of Naples, on 31 December 1920, were 709, the total amount of the credits opened being 34,610,000 liras. In respect of the amounts of the credits opened, the first place is occupied by the consortia (12,157,500 liras); next come the agricultural and rural banks (11,479,000 liras) and the popular banks (5,818,000 liras).

In the working year under review, 21,166,489 liras were employed in ordinary agricultural credit transactions. This sum was distributed as follows: Rediscounts for the intermediary bodies, 9,070,917 liras; direct loans to farmers, 133,930 liras; direct discounts for the intermediary bodies, 11,961,641 liras. The total amount of credit supplied by the Savings Bank of the Bank of Naples under the provisions of the Laws of 7 July 1901 and 2 February 1911 thus reached the sum of 161,435,323 liras.

The credit supplied to farmers (rediscounts and direct loans) may be thus classified according to the purposes for which the loans were obtained:

1. *Loans guaranteed by legal privilege.*

	Number	Amount
For cultivation	3,161	2,689,074.42 liras
» spraying materials	1,615	663,935.95 »
» seeds	1,188	627,102.30 »
» fertilizers	1,233	597,290.41 »
» harvesting	24	22,870.00 »
» food for labourers	8	4,500.00 »
» several purposes	350	234,546.29 »
	7,579	4,839,369.37 liras

(1) See also Article 8 of the Law of 2 February 1911, No. 70.

2. *Loans not guaranteed by legal privilege.*

	Number	Amount
For large live stock	2,192	3,548,535.90 liras
» machines	159	391,126.34 »
» small stock	269	154,429.00 »
» agricultural implements . . .	139	138,253.67 »
» dead stock	43	27,201.00 »
» several purposes.	65	95,932.00 »
	2,867	4,355,478.41 liras

3. *Loans guaranteed by the pledge of agricultural produce*

One loan of 10,000 liras was granted on the security of almonds pledged.

The total number of loans was 10,477, and their total amount 9,204,847.88 liras.

The loans may be thus classified according to the classes of persons to whom they were granted :

	Number	Amount
Occupying owners	7,207	6,918,230.18 liras
Rent-paying tenants	3,029	1,987,557.61 »
Produce-sharing tenants	153	234,524.57 »
Tenants in emphyteusis	58	64,535.42 »
	10,477	9,204,847.78 liras

Direct discounts to the number of 474 were granted to the intermediary bodies. Of these discounts to the amount of 8,888,999 liras were for collective purchases, to the amount of 2,348,233 liras for collective sales and to the amount of 724,408 liras for supplying deficiencies in the means at the disposal of the intermediary bodies themselves.

The rates of interest charged by the Savings Bank remained unchanged in 1920. They were 3 $\frac{1}{2}$ per cent. on transactions with the local institutions (rediscounts and direct discounts) and 4 per cent. on direct loans to farm rs. The intermediary bodies, in their turn, charged rates of interest varying from 3 to 6 per cent., the most usual rates being 5 or 5 $\frac{1}{2}$ per cent.

The *extraordinary* agricultural credit operations, that is the transactions carried out with State money with the object of intensifying cultivation, amounted to a total of 66,363,817 liras. From the time when loans of this kind were first granted up to 31 December 1920 the total transactions amounted to 184,294,296 liras, so that in all, between ordinary and extraordinary credit, a sum of 345,729,619 liras had been advanced to the farmers of some of the Southern Provinces and of the two Provinces of Sardinia.

With regard to the working of agricultural credit in recent years, it is noted in the Report of the Bank of Naples that, owing to the high prices of agricultural produce, the financial position of the farmers has been changed in many localities, and particularly that of the small farmers, whom the Law of 7 July 1901 was specially intended to help. In fact, to the requests made by the Savings Bank for greater activity on the part of the intermediary bodies it was replied by one of them that the association remained inactive "because the peasants and landowners of the district had no need to contract loans, having acquired sufficient money by the sale of their produce." "The farmers," wrote another, "are all supplied with money which they employ partly in the cultivation of the land and partly in the purchase of real estate; in fact the humblest peasant of some years ago has become a landowner and a capitalist, since he has received and still receives 10 to 15 liras a day for his labour." Another intermediary body asserted that the diminution in the loans was due to the prosperity of the peasants: "let it suffice to say that if all the offers of savings deposits had been accepted it would have been necessary to open current accounts with other institutions to prevent vast sums from lying unused." Again, to justify the inactivity of one of these institutions, the president informed the general meeting that "during the year 1919 no loans were granted, because the improved economic conditions of the peasants enabled them to purchase live stock with the savings accumulated by means of their labour." By another association it was reported to the general meeting that no application for a loan had been received, a fact which "if, on the one hand, it paralysed the development of one of the outstanding objects of the institution, on the other hand, was a gratifying indication of the money at the disposal of the members who no longer required, in order to provide for the needs of their farms, to have recourse to credit." Yet another association, in setting forth the same reasons for inactivity, remarked that "even in the future the need will not be felt of drawing largely upon the funds available for agricultural credit."

We have thought it desirable to give prominence to these indications of the new situation which is arising, both to keep the reader informed as to the development of agricultural credit in Italy and to give him the means of forming an accurate idea of the national agricultural problem which, according to the Director-General of the Bank of Naples is not, in present circumstances, a problem merely of credit but is also a problem of "agricultural knowledge, of an accurate idea of technical necessities and a clear conception of commercial requirements," which would bring about the conditions best adapted for the useful employment of credit.

§ 2. THE AGRICULTURAL CREDIT SECTION OF THE BANK OF SICILY AND THE NEW PROVISIONS IN REGARD TO IT.

In 1920, in accordance with the wishes and the needs of the Sicilian agriculturists, a complex series of minute provisions was issued to meet the various needs of agricultural credit in the island, from the point

of view both of the amount of credit to be given and of the methods of granting it. We have already referred to these provisions in an article on "Recent Legislation relating to Agricultural Credit" published in our issue of May 1921; we here treat them in greater detail in order to show their importance.

A. Extension of the Functions and New Constitution of the Section.

— The Decree-Law of 7 June 1920, No. 775, and the Regulations of 19 September 1920, No. 1,418, made under that law, assigned to the Agricultural Credit Section of the Bank of Sicily the new task of providing long term agricultural and land credit in Sicily and made considerable modifications in its constitution, almost all of which were rendered necessary by the new functions assigned to it.

1. *Constitution.* — The Section, while retaining the name of the Bank of Sicily and continuing to be managed by it, was formed into an independent body and endowed with an initial capital of about 17,000,000 liras, formed partly by transferring and assigning to the Section the capital of the Provincial Agricultural Credit Banks of Sicily, partly by an advance from the State of 10,000,000 liras as a special contribution, without interest, until further instructions. This initial capital will be increased by the addition of: (a) the eventual amount of the sums set aside representing 30 per cent. of the land tax on taxable revenues higher than 6,000 liras paid into or to be paid into the State Treasury under the terms of the Law of 15 July 1906, No. 383; and (b) for ten years, beginning with the year 1920, five per cent. of the annual net profits of the Bank of Sicily, as well as those of the Savings Bank attached to it, but, in the case of the latter, not until it has accumulated capital equal to one tenth of the deposits in hand.

The Victor Emmanuel Savings Bank for the Sicilian Provinces may also devote 5 per cent. of its net annual profits to the same purpose.

2. *Functions.* — Being thus put in a position to offer a sufficient financial guarantee (to which may be added that of prudent management) to those who may apply to it for credit in order to provide themselves with more ample means for carrying on their business, the section has been authorized to grant loans to individual farmers or to associations of farmers, or to open in their favour current accounts guaranteed by mortgages for the purchase of land, for the enfranchisement of land from dues, and for land improvement, as well as to grant loans and open current accounts guaranteed by various forms of security for changes in the systems of cultivation.

Loans for the purchase of land may also be granted to public bodies, to co-operative land-holding societies or to other agricultural credit institutions in Sicily to enable them to acquire rural land for the purpose of dividing it amongst individual agriculturists, who will directly cultivate it.

The maximum period for which current accounts may be opened has been fixed at five years, but they may be converted into loans, if it be so agreed. Loans may be granted for a period not exceeding 30 years.

When a current account is converted into a loan, the period of 30 years begins at the date at which the current account expires.

The State will contribute to the payment of interest on loans for the purchase or enfranchisement of land, or for land improvement to an amount to be determined each year by a Decree issued by the Minister of Agriculture with the sanction of the Minister of the Treasury, but not exceeding $2\frac{1}{2}$ per cent. of the sum advanced.

In regard to credit for working capital, in addition to the granting of loans for the purposes specified in the Laws of 29 March 1906, No. 100, of 15 July 1906, No. 383, and of 2 February 1911, No. 70, and the Regulations made under these laws, the Sections had been given the task of granting credit for the management of land, for its ordinary cultivation and for the manipulation and transformation of agricultural produce, so as completely to satisfy every requirement of the agricultural industry. The limits to the sums to be advanced previously laid down have been removed and the Section is authorized to grant credit for working capital to whatever amount may really be required.

This new system, which allows the fullest scope and gives the greatest possible efficiency to the Section in the work entrusted to it of assisting agriculture in Sicily, is based on the new conception, which was formed during the war as a result of the difficulty in maintaining the food-supply of the country — the conception, that is, of all enterprises connected with agricultural production not as a private interest but as a vital interest of the whole nation. As a consequence of this conception, the function of agricultural credit is no longer regarded as consisting only in giving facilities to the small farmers and taking them out of the hand of the usurers, but rather as contributing in the highest possible degree to the increase and improvement of agricultural production, by providing the necessary help in a measure corresponding to the real needs of each farm and by ensuring the most effective application of the credit supplied.

3. *Means for Supplying Credit.* — For long term land and agricultural credit transactions the Section utilizes its own capital, and when this does not suffice, it has itself recourse to credit. In case of necessity the Section has the power to issue bonds (*cartelle*) corresponding to the loans guaranteed by first mortgages and in accordance with the rules laid down by the laws relating to land credit up to the amount of ten times its own capital.

The Deposit and Loan Bank, the National Insurance Institute, the National Social Insurance Fund, the Victor Emmanuel Savings Bank for the Sicilian Provinces, and the Savings Bank of the Bank of Sicily, are authorized to purchase these bonds, but the last named only to the extent of two tenths of the deposits in hand. The Bank of Sicily and the institutions above-mentioned, as well as the Savings Banks in general, are also authorized to make advances on the security of such bonds.

For supplying credit for the provision of agricultural working capital, the Section has the following sums at its disposal: (a) the sums which, taking account of the investment in bonds above referred to, remain

available out of the three tenths of its deposits which the Savings Bank of the Bank of Sicily can devote to agricultural credit transactions ; (b) the sum of 3,000,000 liras which, under the old provisions, could be supplied by the Bank of Sicily by way of an investment of its reserves ; (c) the loan on interest-bearing current account which, even in the past, could be granted by the Victor Emmanuel Savings Bank for the Sicilian Provinces and which can now amount to 20,000,000 liras.

The means thus provided will probably meet all requirements, at any rate for the present.

4. *Security.* — Loans and current accounts for the purchase of land, for its enfranchisement from dues, or for improvements must be guaranteed by first mortgages ; those for changes in the system of cultivation by mortgages of a degree sufficient to give adequate security, except, as we shall see presently, in the case of loans and current accounts not exceeding 10,000 liras. Mortgage loans may be granted for sums not exceeding 80 per cent. of the purchase price or the estimated value of the land.

Loans for the provision of working capital, whether they are granted directly by the Section or through the medium of intermediary bodies, and loans for changes in the system of cultivation, if they do not exceed 10,000 liras, may be guaranteed by an agreement giving to the Section that form of privilege which was established by the Law of 23 January 1887, No. 4,276, and was further regulated by the Lieutenantcy Decrees of 8 October 1916, No. 1,336, and of 26 July 1917, No. 1,269, with rules which greatly increased its efficacy. The legal privileges arising out of the Code and previous special laws remain intact.

5. *Fiscal Privileges.* — By virtue of the provisions of Article 7 of the Decree of 22 April 1920, No. 516, confirmed by Article 1 of the Decree of 7 June 1920, No. 775, acts of every kind connected with the transactions of the Section with individual farmers or farmers' associations are exempt from any stamp, registration or mortgage tax, and no due or charge is payable for any reason on the acts themselves. The new provisions do not explicitly assign to the Section the fiscal privileges mentioned in Article 9 of the Law of 15 July 1906, No. 383, which granted to the Provincial Agricultural Credit Banks, now amalgamated with the Section, exemption from the tax on personal property and the right to gratuitous legal representation before the courts, but there seems little doubt that these privileges, too, are enjoyed by the Section.

6. *Changes in the Organization.* — As the new transactions involve the necessity of examinations, valuations and inspections of a technical character, the Regulations of 19 September 1920, No. 1,418, laid down that a register must be kept from which are to be selected the valuers who will be asked to report case by case from the technical point of view on the various applications for loans, or to make the necessary inspections when advances are gradually made according as the work progresses.

Moreover, while the composition of the Special Discount Committees for Agricultural Credit remained unchanged, as far as credit for the pro-

vision of working capital is concerned, as it was laid down by Article 2 of the Law of 2 February 1911, No. 70, it was provided that, for giving an opinion on or deciding in regard to land improvements, changes in the system of cultivation, enfranchisement from dues, and the purchase of land, four members instead of two were to be nominated by the Committee of Management of the Bank and these four were to be a member of the Technical Committee of the Cadastral Survey, and an engineer of the Office of Civil Engineers, nominated by the heads of these offices respectively, the local Director of Itinerant Agricultural Instruction, or, failing him an expert attached to agricultural institutions in the province, and a valuer.

A Central Credit Committee has been established for the Section, composed of the Director of the Section, who is chairman, and of four other members, of whom one is nominated by the Minister of Agriculture with the approval of the Minister of the Treasury, two by the Committee of Management of the Bank from amongst the managers of co-operative land-holding societies and one by the Committee of Management of the Victor Emmanuel Savings Bank for the Sicilian Provinces. The Central Credit Committee has the following important duties :

(a) to fix the principles upon which agricultural credit shall be distributed and to propose to the Committee of Management of the Bank the special rules which it may be necessary to issue.

(b) to give its opinion upon general questions and upon the interpretation of the Laws and Regulations relating to agricultural credit.

(c) to keep the register of valuers of which we have spoken above.

(d) to propose to the Committee of Management of the Bank the scale of fees payable by the borrowers to the valuers and lawyers for their respective services.

(e) to decide upon the granting of loans and the opening of current accounts for the purchase of land, for the enfranchisement of land from dues, for land improvement and for changes in the system of cultivation, with power to delegate to the local Discount Committees the granting of loans and opening of current accounts for sums less than 15,000 liras.

Lastly there has been established in connection with the Section a permanent Government Commissioner's Office, to watch over and report upon the working of the Section and upon the arrangements which it is necessary to make in order that the transactions connected with the subdivision of land, with land improvement and with changes in the system of cultivation may benefit by the assistance of the technical bodies dependent on the Ministry of Agriculture.

The new regulations regarding credit for the provision of working capital and, in particular, the regulation concerning the amount of the loans came into force on 1 November 1920.

With regard to long term agricultural credit, this service was started in 1921. The Bank of Sicily proposes to give the most careful attention to it " knowing how greatly facilities for subdividing land are desired by the rural population and how great an advantage it is, as a rule, from an

economic point of view, provided the technical necessities are borne in mind, to substitute small holdings cultivated by the owner for the large estates owned by absentee landlords, and what an important contribution may be made to the permanent re-establishment of social peace in the rural districts by hastening the peaceful and beneficial transfer of the ownership of the land into the hands of those who cultivate it; knowing, too, what a vast field there is in Sicily for fruitful enterprises for the improvement of the land and for changes in the system of cultivation and how greatly facilities for such enterprises may contribute to local well-being and to the improvement of the general economic condition of the country."

Having thus noted the new organization and the new duties of the Section, we pass to speak briefly of the actual working of the Section in the year 1920.

B. Working and Results of the Service in 1920. — On 31 December 1920 the intermediary bodies inscribed in the *castellotto agricolo* numbered 305; of these 285 were co-operative societies (including 248 societies with unlimited liability, 35 limited liability societies and 2 societies containing members with unlimited liability and members with limited liability) and 20 were otherwise incorporated. The co-operative land-holding societies which acted as intermediary bodies numbered 29 and rented land to the extent of 23,778.1982 hectares.

The members of the intermediary bodies numbered 45,640 in 1920. The total assets of the members of the co-operative societies with unlimited liability amounted to 212,246,452 liras. The owned capital of the intermediary bodies amounted to 5,020,765 liras, the deposits lodged with them to 26,753,258 liras and the bills in hand to 12,515,019 liras.

The number of communes in the island in which there was an intermediary body for the provision of agricultural credit was 179 out of a total of 358 communes.

The aggregate amount of the credits opened in favour of the intermediary bodies was 17,982,000 liras. Of the intermediary bodies in whose favour credits were opened 144 did business with the Section in 1920. In all 14,916 bills to a total amount of 18,063,125 liras were discounted for the intermediary bodies and for private individuals. According to the purpose for which the bills were discounted, they may be thus classified: For seeds, fertilizers, spraying materials, cultivation and harvesting, 14,505 bills to the total amount of 13,605,207 liras; for machines, implements, and live and dead stock, 296 bills to the total amount of 834,576 liras; direct discounts to intermediary bodies, 115 bills to the total amount of 3,623,342 liras.

Up to 31 October 1920 the rate of interest on all agricultural credit transactions, direct or indirect, remained unchanged at 4 $\frac{1}{4}$ per cent., as the provisions in force required. When the Regulations of 19 September 1920, No. 1,418, which authorized the Committee of Management of the Bank to fix annually, at a figure not exceeding the normal rate of discount, the rate of interest to be charged on credit transactions for

the provision of working capital, came into force on 1 November 1920, it was considered necessary to raise the rate of interest to 6 per cent. on direct transactions with individual farmers and to 5 per cent. on transactions with or through the medium of the intermediary bodies.

We need not give further particulars of the working and results of the Agricultural Credit Section of the Bank of Sicily in 1920; but it must be noted that the gradual diminution in the demand for agricultural credit which took place in Sicily, for various reasons, between 1914 and 1919, now seems to have definitely ceased. The increase in the transactions which is now beginning to take place will be the more rapid and the more considerable in proportion as the farmers devote themselves to making technical progress in the methods of cultivation and to perfecting the conservation, manipulation and sale of agricultural produce. To promote and to assist development in these directions, the General Council of the Bank of Sicily appeals to the zealous and persistent activity of the technical bodies interested in the matter, chief amongst these being the Itinerant Agricultural Instructors.

Part IV : Miscellaneous Questions relating to Agricultural Economy

I. — ECONOMIC AND SOCIAL CONDITIONS OF THE AGRICULTURAL CLASSES

FRANCE.

THE STEPS TAKEN DURING THE WAR TO REPLACE MOBILIZED FARMERS AND FARM-WORKERS.

(Conclusion).

§ 4. THE INSTITUTIONS ENGAGED IN RECRUITING AND DISTRIBUTING AGRICULTURAL LABOUR.

In the course of this study, we have had occasion to mention more than once the work of the National Agricultural Labour Office and the Departmental Agricultural Labour Committees. We must now state the objects and examine the working of these two institutions.

A. — *The National Agricultural Labour Office.*

At the beginning of the War, there was established at the Musée Social, in Paris, a committee for dealing with the offer and demand for agricultural labour for the refugees. This Committee was a section of the Central Committee for the Refugees, attached to the Ministry of the Interior, and was managed by a group of persons representing certain agricultural societies, with M. Méline as chairmain. The Committee asked the Minister of Agriculture to assist in developing this rudimentary organization. The Minister promised his help, obtained offices for the Committee in the École des Beaux-Arts and on 15 March 1915 the National Agricultural Labour Office was opened there, under the patronage of the

Minister of Agriculture and of the great agricultural societies. By an Order of 3 January 1917, the Office became a service of the Ministry of Agriculture, attached to the Minister's Cabinet.

At that time it consisted of a Central Service at Paris and Immigration Offices at the frontiers.

The Central Service was divided into three sections.

The first of these conducted the negotiations with the military authorities with a view to obtaining from them the indispensable aid of soldiers or prisoners of war, either individually or in groups, for agriculture and the allied industries.

As it was impossible to restore to the land all the labour of which it had need, it was necessary to establish a second section, with the object of collecting the available labour wherever it could be found, unemployed or refugees, persons unfit for military service or foreign immigrants.

Lastly, a third section undertook the release and distribution of the older soldiers whom the Ministry of War consented to place at the disposal of agriculture. The same section also undertook the necessary inquiries into cases where men were released without sufficient justification.

The Chief of the Service co-ordinated the work of the three sections. Under his directions technical studies regarding agricultural labour were carried out and the bulletin called *La Main-d'œuvre agricole* was edited. It is from this bulletin that most of the information contained in this study has been drawn. It was addressed to those who were interested in knowing the general ideas, the decisions and the regulations regarding agricultural labour and it served as a means of keeping the Central Service in touch with the Departmental Agricultural Labour Committees. The Central Service negotiated with other administrations for the purpose of obtaining labour, which it distributed amongst the departments. The Departmental Committees, in turn, distributed the labour within the departments, dealt with questions of agricultural labour from the local point of view, and corresponded with the Central Service whenever difficulties arose which could not be settled on the spot. An Inspector-General of Agricultural Labour travelled continually over France to get into touch with the officers who were appointed to supervise military agricultural labourers. These officers were, as far as possible, themselves farmers and one such officer was appointed for each department. They were attached to the Departmental Agricultural Labour Committees and came in touch, in the course of their tours of inspections, with the inspectors in each canton, who were professional agriculturists giving their services voluntarily, when such men could be found (1).

As to foreign labourers, the National Agricultural Labour Office

(1) Statement made by M. Henry Girard, Assistant Chief of the Service, to the general meeting of 1917 of the Société d'Economie Sociale (*La Réforme Sociale*, 1-15 September 1917, pages 102 to 106). We may add that the Agricultural Labour Office subsidized, in a certain number of departments, Departmental Agricultural Labour Exchanges. As these Exchanges only undertook to find employment for ordinary agricultural labourers, they do not here concern us.

early provided for the establishment of Immigration Bureaux, especially on the Spanish frontier (1). As early as 1915 such Bureaux were established at Cette, Cerbère, Fos and Hendaye. In the succeeding years they were rapidly formed; in 1916, new Bureaux were opened at Marseilles, Arreau-Tramezaignes and Bordeaux, and in 1917 at Saint-Jean-Pied-de-Port, Bourg-Madame, Le Perthus, Port-Vendres, Arles-sur-Tech, L'Hospitalet, Bagnères-de-Luchon, Pierrefitte-Nestalas and Ossès.

In February 1917, at the request of the Minister of Agriculture, the Office tried to organize the immigration of Portuguese agricultural labourers and with this object sent a special representative to Lisbon to study the question thoroughly on the spot.

It was not to be expected that many immigrant labourers would enter France by the Italian or Swiss frontiers during the continuation of hostilities. Nevertheless it was necessary that foreign labourers arriving either from Italy or from Switzerland should not be exempted from the regulations applying to immigrants entering the country. Bureaux were accordingly established at Mentone, Larche and Modane in 1916 and at Bellegarde, Saint-Julien, Annemasse-Tivian, Annecy, Briançon, Pontan in 1917 and afterwards at Gex, Frasnay, Pontarlier and Morteau.

At the beginning the organization of the Bureaux was naturally tentative, but after some experiments had been made the mechanism became sufficiently well defined to admit of general instructions being issued. The first regulations were issued by the Minister of Agriculture on 1 March 1916. Up to 1917, the Bureaux were established in the different localities with special rules.

Experience showed which were the best regulations, so that in the course of the year 1917 it became possible to complete the organization of each of the Immigration Posts and Bureaux and to remodel their rules with a view to their unification.

The question of immigration, moreover, being closely connected with the surveillance of foreigners in France was of special importance for the Public Safety Department. The Ministry of the Interior was necessarily interested in the question. In fact a report was issued by that Ministry on 18 April 1917 with a view to regulating the recruiting and distribution of foreign labourers in such a manner as to reconcile the interests of the workers and those of their employers with the exigencies of the defence of the country. It was laid down that the workers must provide themselves with an identification card which would serve as a safe-conduct for them within the limits of the locality to which they had been authorized to proceed. Penalties were laid down for infringements of the rules on the part of the labourers and failure to fulfil their liabilities on the part of the employers. To this report was added a very complete decree stipulating that each Immigration Post should be provided with an iden-

(1) In regard to this question, we give a summary of a pamphlet published in 1918 by the National Agricultural Labour Office under the title of *Placement et immigration de la main-d'œuvre agricole*.

tification service and, as far as possible, a medical and photographic service.

Following upon this decree of 27 April 1917, the Minister of the Interior addressed a note on 12 May to the prefects of the frontier departments informing them that the Ministry of Agriculture had reorganized and completed the system previously adopted for the Immigration Bureaux and Posts. In fact on 15 May 1917 a new and enlarged set of general regulations was issued, signed by the Ministers of the Interior and of Agriculture.

Subsequently a Decree dated 18 October 1917 entrusted to the Ministry of Labour the work of centralizing the information regarding the demand for labour and the available sources of labour and of distributing the available labour between the public services which required it, except in regard to the foreign labourers engaged on agricultural work, this remaining one of the duties of the Ministry of Agriculture.

Thus, at the end of the war, there was a uniform set of regulations applied by the immigration services working under the direction of Special Police Commissioners on the Spanish, Mediterranean, Italian, and Swiss frontiers. These immigration services comprised Posts and Bureaux, all organized by the National Agricultural Labour Office and in constant touch with it. In the Immigration Posts the Special Commissioners themselves supervised the various operations. There was a Bureau in those localities where the number of immigrants was sufficiently large to necessitate the employment of a special employee. In that case an agent was appointed by the Agricultural Labour Office subject to the approval of the Commissioner. It was his duty to regulate, under the direction of the Special Commissioner, all questions of detail regarding immigration. The Director of the National Office fixed his salary and gave all instructions for the working of the different services. At the beginning of each month the agents and the Special Commissioners sent to the Paris office copies of their accounts for the previous month as well the statistics of immigration.

The practical working of an Immigration Bureau may be thus described:

Every labourer entering France had to present papers showing his age, whether he was married or single, etc. These were examined at the Commissioner's office, an essential formality which preceded all other formalities. As soon as his entry into France was authorized, the immigrant had to obtain a special card giving him the right to move from place to place and serving instead of a French passport. It was at this point that he entered into relations with the Immigration Services.

However, before delivering the cards, the agents of these services had to deal with the questions of (1) photographs, (2) vaccination, (3) engagement.

(1) *Photographs.* — Photographs were affixed to the identification cards, to the counterfoil remaining at the Commissioner's office and to the notifications sent to the mayors or police commissioners in the interior. When the immigrants did not possess photographs in accordance with the

requirements of the Public Safety Department, facilities were provided to enable them to obtain them on the spot, through the immigration services, at reasonable prices.

(2) *Vaccination*. — Every immigrant had to present a medical certificate showing that he had been vaccinated not more than three years before and as experience had shown that there was reason to fear that in foreign countries false certificates were obtainable, the certificate presented had to be obtained in France. Under these circumstances, the greater number of immigrants were unable to prove that they had been vaccinated. The immigration services arranged for the vaccination of the immigrants at certain hours. The immigrant paid 50 centimes as medical fees.

(3) *Engagement*. — The identification card had necessarily to indicate the name of the employer to whom the immigrant was going. Exceptionally the name of the employer might be replaced by that of a Departmental Agricultural Labour Office, this Office taking care to have all the necessary indications inserted in the card when the worker was definitely engaged.

But three cases might occur: (1) the worker might arrive with a hiring agreement signed by the employer to whom he was going; (2) he might be brought by an employment agent; (3) he might be travelling alone, without a hiring agreement and without knowing for whom he was going to work.

In the first case, there were no difficulties, provided the hiring agreement or certificate of engagement bore the signature of the employer witnessed by the mayor.

In the seconde case the recruited workers had to present themselves at the Immigration Bureau, accompanied by the employment agent, whose duty it was to submit to the representative of the National Agricultural Labour Office the certificates of engagements, signed by the employer and witnessed by the mayor. The agents satisfied themselves whether these immigrants seemed to be suited or not for the work for which they were engaged, and, where necessary, referred cases to the special commissioners. They were also instructed to notify to the commissioners whatever instances of recruiting or engagement came to their knowledge, as the National Agricultural Labour Office neither recognized nor commissioned any employment agent.

Lastly, when an agricultural labourer arrived at the frontier without any hiring agreement, the representative of the Agricultural Labour Office submitted offers of work to him. If the labourer accepted one of these offers, the agent then engaged him after having satisfied himself of his ability to do the proposed work and having examined the certificates he presented.

Sometimes private individuals, agricultural syndicates, or Departmental Committees preferred themselves to send a representative to the frontier to select labourers from amongst the immigrants in accordance with their requirements. In this case, the conditions which such repre-

representatives proposed were submitted to the agents of the Agricultural Labour Office, in order that the latter might exercise such control as would prevent as far as possible the exploitation of the immigrants. In no case were the employment agents or employers allowed to treat with the immigrants without the knowledge of the Immigration Offices.

As soon as the hiring agreements had been examined by the Special Commissioners and the photographs and vaccination certificates had been received by the Immigration Agents, the labourers were given their identification cards. These were viséd by the Special Commissioners and handed back to their holders on payment of a fee of 50 centimes. The immigrants were then allowed to proceed, at their own expense, to the place where they were to be employed.

As might have been anticipated, the National Agricultural Labour Office has continued to exist after the war and has been adapted to the new conditions arising out of the state of peace (1). This is not true, however, of the Departmental Agricultural Labour Committees, the work of which ceased when the exceptional state of affairs which led to their formation came to an end.

B. — *The Departmental Agricultural Labour Committees* (2).

The Departmental Agricultural Labour Committees were formed under the terms of a Circular, dated 22 December 1915, issued by the Minister of War. Originally they were composed of the Prefect, or his deputy, as chairman, a General or his deputy, and the Director of Agricultural Services. A further Circular, issued on 8 August 1916 added to these members a member of the General Council of the Department for deliberations concerning prisoners of war. By a Circular dated 31 January 1917, the Minister of Agriculture added to each committee three farmers representing the agricultural organizations of the department. Finally, by a circular dated 3 May 1917, the Minister of War and the Minister of Agriculture added to the Committees, but without the right to vote, the Officer appointed as inspector of agricultural labour in the department.

Formed for purposes of decentralization, the Departmental Agricultural Labour Committee acted as intermediary between the Army and the Minister of Agriculture on the one hand and, on the other hand, the persons requiring agricultural labourers or skilled workmen in allied industries. Its essential duties were: (1) to receive applications for labour (agricultural labourers and skilled workmen) and to distribute the labourers placed at its disposal; (2) to supervise the strict utilization of the labour, through the departmental agricultural inspectors, assisted by the cantonal agricultural inspectors, the mayors, the agricultural committees, and the

(1) On this point see the *International Review of Agricultural Economics*, December 1920, page 501.

(2) The account which follows is drawn from a Note, dated 5 September 1917, addressed by the Minister of Agriculture and the Minister of War to the Departmental Agricultural Labour Committee.

police; (3) to intervene in certain cases in administrative questions, in disputes and in matters of discipline.

These functions were sufficiently complex to make it necessary to describe the more important of them in greater detail.

(1) *Applications for and Distribution of Labour.* — By means of agricultural labourers released for work on the land, gangs of soldier labourers, gangs of prisoners of war, interned civilians, or colonial labourers, the Departmental Committees had to satisfy all demands, giving preference to the farms of widows of wives of farmers who had been called to the Colours.

(a) *Agricultural Labourers Released for Work on the Land.* — When such labourers, coming from a depot, arrived at the Prefecture, they were assigned to a particular locality, account being taken of the wishes expressed by both employers and workers, of the needs of the different parts of the department, etc. Generally speaking, the men were assigned to a commune, in which they worked under the supervision of the mayor. The Committee could, however, assign the released labourers directly to a particular farm, when its importance or special circumstances justified this step.

With regard to the distribution of men belonging to the invaded districts the following principles were adopted from the time when agricultural labourers were first released: to place the men in the district to which they asked to be sent, whether it was in the uninvaded part of their department, or in the department in which their family resided, or where they had found a farmer who wished to utilize their services or their skill.

(b) *Gangs of Soldiers Labourers.* — Throughout the year and more particularly during the busy seasons, it was the military authorities who placed the largest number of labourers at the disposal of the Committee. It was the duty of the Committee to distribute them judiciously.

If the supply obtained through the help of the departmental depots was clearly insufficient, in view of the needs, the Committee, through the medium of the representative of the military authorities, applied to the General Commanding the Military District to have additional gangs sent to the points where the situation was most critical. Lastly, when the ordinary resources of the military district were exhausted, the civil authorities, in agreement with the military authorities, made application to the Minister of Agriculture.

(c) *Prisoners of War; Interned Civilians; Colonial Labourers.* — Prisoners of war were supplied by drawing upon the prisoners' contingent of the Departmental Agricultural Company. If this contingent was insufficient, the Committee, through the medium of its chairman, the Prefect, applied for its reinforcement to the Minister of Agriculture (National Agricultural Labour Office). It was also to the National Labour Office that applications were made for colonial labourers and interned civilians.

(d) *Skilled Workmen whose call to the Colours was Postponed or who were given Special Leave.* — The Committee played a not less important part in regard to the skilled workmen indispensable for agricultural pro-

duction. It had to draw up in good time, according to the instructions received, detailed statements regarding skilled workers, such as owners of threshing tackle and mechanics in attendance thereon, blacksmiths, wheelwrights, harness-makers, repairers of agricultural implements, the specialized workers required for particular crops, etc. The Committee drew up these statements, after obtaining all useful information, in such a manner as to distribute the available supply to the best advantage over the whole of the department and to bring the applications into proportion to the work to be done.

The Committee also drew up the individual applications for postponement of the call to the Colours in the course of the year.

The men whose call to the Colours had been postponed were supervised by the Departmental Inspecting Officer, by an Inspector specially appointed to supervise them and by the police. Infractions of the regulations were submitted to the Departmental Agricultural Labour Committee who could propose to the special inspector that the men in question should be called to the Colours and could ask at the same time that a disciplinary punishment should be inflicted when they joined their units. But it was understood that the Committee had no authority to inflict either penalty, this being within the competence of the military authorities alone.

(2) *Utilization of the Labour.* — The labourers were under the supervision of the Departmental Inspecting Officer and the non-commissioned officers who assisted him, the cantonal inspectors of agricultural works, the mayors, the agricultural committees, and the police, acting in close touch with the Committee. All classes of soldier labourers were thus supervised, gangs, soldiers on leave or whose call to the Colours had been postponed, but more particularly the mobilized agriculturists released for work on the land.

(a) *Farmers Released for Work on the Land.* — The men of this class were not only expected to produce as much as possible, either by the energy which they displayed in manual labour or by the judicious management of their farms, but besides the ordinary work done on their farms they were called upon to render services to the community.

The nature and amount of the services to be rendered varied with the size of their farms; the small farmers were expected to do a certain number of days' work on the other farms of the commune; persons farming a slightly larger area were expected to do the same but to a less extent. As to the medium-sized and large farmers, it would have been a mistake to impose one or two days of manual work a week on persons devoting all their time to the management and supervision of their farms; they had nevertheless to participate in the collective effort, being compelled to render services to their neighbours by placing at their disposal teams or labourers for ploughing, sowing, harvesting, carting, by giving advice in the organizing the cultivation of particular crops and in the care of animals, by helping in purchases and sales, etc.

(b) *Agricultural Labourers Released for Work on the Land.* — These men were assigned either to a commune or to a particular farm.

In any case they were placed under the direct supervision of the mayors who proceeded to utilize them in the limits fixed by the Departmental Commission according to how they were assigned.

Men who were not assigned to a particular farm were placed with the farmers of the commune, preference being given to the widows or wives of farmers called to the Colours.

If it was desirable, gangs could be formed on the initiative of the mayor or on that of the cantonal inspector, or by an order of the Departmental Committee; these gangs were then employed either in a commune, or in part of a canton or in a specified portion of the department.

(3) *Disputes, Administrative Questions and Matters of Discipline.* — The Committee expressed, after inquiry, an opinion on the claims made by the military authorities or by the interested parties on the occasion of applications for release. It was the Committee, too, which took cognizance of the movement of men released for agricultural work. Men already assigned, at the request of the employers or of the labourers, might be moved from one place to another within the department. The applications were received directly by the Departmental Committee or transmitted by the National Office; movements might also be ordered by the Committee on its own initiative, in consequence of local needs.

The National Agricultural Labour Office alone could order movements from one department to another. The men so moved had to be sent to the prefecture of the new department to which they were assigned.

It was the Departmental Committee which ordered changes of class, either on the application of the interested parties or as a punishment. The transfer of a man from the class of farmers to the class of agricultural labourers, ordered as a punishment, could not be revoked except by the Minister of Agriculture.

It was the duty of the Departmental Committee to proceed to the revision of the cases of men released for work on the land whose position seemed to them to be irregular; only men who in normal times were wholly or principally occupied in agriculture could be so released. Any man wrongly released was to be immediately sent back to his unit. The National Office afterwards made investigations to ascertain how far the mayor guilty of issuing incorrect certificates could be held responsible.

As to the men regularly released, the penalties were: Admonition, imprisonment, inflicted by the Inspecting Officer, up to eight days, or by the military authorities, and undergone, if necessary, in the depot nearest to their places of residence; transfer from the class of farmers to the class of agricultural labourers and, lastly, return to their units. The last two penalties were inflicted by the Departmental Committee.

We may add that the Departmental Committees were expected to meet at least twice a month. Every three months they held a special meeting to which the cantonal inspectors of agricultural works, the Commander of the Company of Gendarmes and the Officer Commanding the Prisoners of War Depot were summoned.

II. — LAND SYSTEMS

AUSTRALIA.

THE REPATRIATION OF AUSTRALIAN SOLDIERS.

SOURCES (OFFICIAL):

SPEECH BY SENATOR E. D. MILLEN (MINISTER FOR REPATRIATION) ON AUSTRALIAN SOLDIERS' REPATRIATION BILL. WEDNESDAY 21ST MARCH, 1920. Melbourne.

SPEECH BY THE HON A. POYNTON, M. P., ON AUSTRALIAN SOLDIERS' REPATRIATION BILL. (FROM THE "Parliamentary Debates," 11TH APRIL, 1920). Melbourne.

OFFICIAL YEAR BOOK OF THE COMMONWEALTH OF AUSTRALIA, No. 13, 1920. Melbourne, 1920.
LAND FOR SOLDIERS. Issued under authority of the Minister for Lands, N. S. W. (Hon. W. G. Ashford, M. L. A.). Sydney, 1919.

OFFICIAL YEAR BOOK OF NEW SOUTH WALES. 1919. Sydney, 1920.

FORTY-FIRST REPORT OF THE DEPARTMENT OF LANDS BEING FOR THE YEAR ENDED 30 JUNE 1920. ALSO THE REPORT OF THE DIRECTOR OF SOLDIERS' SETTLEMENTS AND THE REPORT OF THE WESTERN LAND BOARD FOR THE SAME PERIOD. Sydney, 1920.

§ I. EARLY HISTORY OF THE REPATRIATION MOVEMENT IN THE COMMONWEALTH OF AUSTRALIA.

In 1915, the first Federal Parliamentary War Committee and the State War Councils, were brought into existence. Already at that time private efforts were being made for the benefit of returned soldiers, but, although good work was being done, it was of a temporary or ameliorative character, and even at that early date it was felt that there was need for some financial assistance towards the permanent re-establishment of the soldiers.

At the beginning of 1916 the Federal Parliamentary War Committee propounded the idea of a Repatriation Fund, from which advances might be made to returned soldiers and their dependants for the purchase of stock, seed or plant, and by way of general assistance as distinct from ameliorative aid. This idea was agreed to at a conference of Federal and State Ministers held in Melbourne in February 1916, and on 18 April 1916 a special appeal for funds was issued by the Federal and State Governments, and to enable the fund to become immediately operative, the Commonwealth Parliament voted a contribution of £250,000 to supplement some large private donations then promised.

The control of these funds was regulated by the Australian Soldiers' Repatriation Fund Act, which was passed on 31 May 1916. A Board of

Trustees was formed, having the Prime Minister of the day as chairman and embodying representatives of all parties in the Federal Parliament and of outside interests, and, at a later date, a committee of five was appointed to transact the business of this Board.

The Act provided that the disbursement of money and the allocation of property should be effected through the State War Councils, but there were so many activities carried on in the States that were outside the jurisdiction of the trustees that although the administration was designed to secure equality of treatment so far as the Repatriation Fund was concerned, their efforts at best but touched the fringe of things. The necessity of Commonwealth control arose out of these circumstances, and the Prime Minister, as chairman of the Repatriation Fund Trustees, requested the Executive Council of the Trustees to submit recommendations for giving effect to the desires of the Government.

These recommendations were submitted, and at a conference of Federal and State Ministers held in Melbourne in January 1917, the broad lines of repatriation were agreed upon.

In 1917 the Australian Soldiers' Repatriation Act was passed, giving the Commonwealth control of the repatriation effort in Australia. The Act itself embodied no scheme, but provided the machinery for carrying any scheme into effect.

In moving the second reading of the first Repatriation Bill, in the Senate, the Minister (Senator Millen) defined "repatriation" as "an organized effort on the part of the community to look after those who have suffered either from wounds or illness as a result of the war, and who stand in need of such care and attention. . . . a sympathetic effort to reinstate in civil life all those who are capable of such reinstatement."

On 31 December 1917 the Australian Soldiers' Repatriation Fund was in credit to the extent of £398,464. This amount was received from the following sources:

	£
Commonwealth grant.	250,000
Interest thereon.	7,045
State Contributory Funds.	133,134
Exhibition of War Films.	8,285

Against this amount gifts, expenses, etc., to the value of £75,383 were to be set on 31 December 1917, leaving assets to the value of £323,081. Disbursements were made by the State War Councils to the extent of £235,248.

The Repatriation Department was officially inaugurated on 8 April 1918, but officers of the new department were actually at work from the end of 1917. When the Act came into force the Minister had as his advisers a Commission of seven members.

§ 2. THE DEPARTMENT OF REPATRIATION.

The organization of the Department of Repatriation provides for a Central Administrative Committee of three paid members, termed the Repatriation Commission, one of whom is chairman, and each of whom is a returned soldier. Repatriation headquarters are in Melbourne. District branches have been established in the capital city of each State, and associated with these branches are State Boards, comprising three paid members, one of whom is chairman, and providing for the representation of returned soldiers. The permanent official at the head of each State organization is termed Deputy Commissioner. A network of local Committees, working within clearly defined territorial boundaries, is connected with the district branches. The local committees are voluntary organizations possessing dual functions. They act as sub-agents under the control and direction of the Department so far as the disbursement of assistance specifically provided by the Department is concerned, and they are vested with discretionary powers in regard to the disbursement of supplementary assistance, organized and raised locally. This policy, though in the main the same in each State, differs in its operation according to the laws of the individual States.

The policy of the Department is based upon four main principles: (a) To secure the re-establishment of returned soldiers in the industrial life of the community to the fullest extent that circumstances permit; (b) to maintain these soldiers until an opportunity for such re-establishment is assured; (c) to provide for the care of the dependants of soldiers who on account of injuries sustained are unable to provide for those formerly dependent upon them, and (d) to provide medical treatment after discharge for returned nurses, sailors, soldiers and others who are suffering from disabilities caused or aggravated by War service.

To give effect to these principles the Department undertakes:

(1) To provide suitable employment for those who are able to follow their previous occupation or one similar to it, and to pay maintenance allowance until such opportunities are presented;

(2) To restore to the fullest degree of efficiency possible, by means of vocational training, those who on account of war service are unable to follow their pre-war occupations, and during the period of training to assure them adequate maintenance;

(3) To maintain by pensions or in hostels totally and permanently incapacitated soldiers and their dependants, and soldiers' widows with children;

(4) To supply gratis all necessary treatment, surgical aid and medicaments; all hospital fees, and transport expenses to and from the hospital; with allowances for certain classes for the period of treatment. (Where hospital treatment is not feasible, treatment may be given in the home or in such place as may be approved).

The primary narrow definition of Discharged or Returned Soldier has now been extended and we here give the definition as it stands today in the States of Australia. ■

Definition of Discharged or Returned Soldier in the States of Australia.

New South Wales. — (a) Resident in Commonwealth, who enlisted in naval or military forces of Commonwealth for service abroad or in United Kingdom and has served outside the Commonwealth.

(b) Resident in Commonwealth who enlisted as above but was unable to serve abroad through circumstances not within his own control.

(c) Who has received his discharge and is resident in Commonwealth. Minister may extend definition to other residents who are discharged and are residing in the Commonwealth.

Victoria. — (a) Resident in Commonwealth who was appointed an officer or enlisted in His Majesty's or in Commonwealth naval or military forces for service abroad and served abroad, who was discharged and returned to or resides in Victoria.

(b) Any such person who enlisted and was unable through circumstances not within his own control to serve as aforesaid.

(c) Non-resident member of His Majesty's naval or military forces who has come to Victoria.

Queensland. — Any person who has been a member of the A. I. F. or of any naval or military forces of the Commonwealth or has joined the naval or military forces of the United Kingdom and who has received an honourable discharge. Governor may extend definition to include any member of His Majesty's naval or military forces or of the naval or military forces of any allied power who received his discharge before arrival in Queensland.

South Australia. — Any person who (a) has been a member of the British Navy or Army or of the A. I. F. or of any naval or military force raised in any part of the British Empire for service in the war; and (b) has served in connection with the war; and (c) has received his discharge.

Western Australia. — Any person who has been on active service with His Majesty's naval or military forces.

Tasmania. — Any person (I) who (a) has been a member of the A. I. F. or of any other naval or military force raised in the Commonwealth for service in the war, or, though a resident of the Commonwealth, has joined the naval and military forces of the United Kingdom (b) has served abroad, (c) has returned to Tasmania; (II) who enlisted and was unable to serve abroad owing to circumstances not within his own control; (III) who has been a member of the naval or military forces of the United Kingdom, and has been discharged and has come to Tasmania to farm or settle upon the land pursuant to arrangement with the Imperial Government.

The activities of the Department of Repatriation are classified under five sections — employment, vocational training, land settlement, housing, and assistance.

From 8 April 1918 to 30 June 1920 the number of applications for employment was 185,727, and the number of positions filled 106,139.

Vocational training is designed for — (I) Soldiers incapacitated from following their usual occupations; (II) Apprentices whose indentures were interrupted by war service; (III) Widows without children (In cases where a widow with children satisfies the State Board that adequate arrangements can be made for the care of her children during training hours, applications for vocational training may be approved); (IV) Students whose studies were interrupted by war services; (V) Members of the A. I. F. who enlisted under the age of twenty years.

Up to 30 June 1920 classes representing 95 trades and callings had been established, and the number of men who had completed training was 6,070; and the number in training 21,437.

With regard to the settlement of the soldiers on the land, it was agreed at the Premiers' Conference in Melbourne in 1917 that the States should undertake the work of settling soldiers on the land and that the Commonwealth should finance them for this purpose. The original arrangement provided that the Commonwealth should take the responsibility of finding up to £500 per settler as working capital, for improvements, implements, seed etc., an amount which was subsequently increased to £625 per settler.

At the Premiers' Conference held in January 1919, the grants shown in Table I (page 606) were agreed upon.

As the number of applicants exceeded the estimates, the States sought further assistance from the Commonwealth, and at the Premiers' Conference held in July 1920 it was agreed that the Commonwealth Government should advance to the States £1,000 per settler — £625 per settler (on the average) as working capital, and £375 per settler (on the average) for resumptions and works incidental to land settlement, approved by the Commonwealth.

The question of housing in the Commonwealth is dealt with by the War Service Homes Commission and through the Commonwealth Bank. Up to 31 May 1920 the results were as follows: — Altogether 581 homes had been completed under the Commission, while 2,198 were in course of construction. There were 481 additional contracts let for houses upon which constructional work had not yet been commenced, while tenders been called for a further 819 houses but these tenders had not been finally dealt with at that date. The number of houses which the Commissioner had assisted to build was 41, and 5,150 existing houses had been purchased by the Commissioner on behalf of returned soldiers or dependants eligible under the Act, at a cost of £2,894,629. Mortgages lifted number 1,288, involving £609,794. The total applications approved by the Commissioner to 31 May 1920 numbered 10,554, the amount involved being £6,186,195. The Commissioner also had purchased

TABLE I. — *Provision for Soldier Settlement made by the Commonwealth Government to the States of Australia in 1919, and Results to date.*

State	No. of settlers	Advances to settlers	Advances to married men	Land resumption	Public works	Special provisions	Total	No. of soldiers settled to 30 April 1920	Holdings available	Amounts reimbursed to State Govt. by Commonwealth Govt. to 30 June 1920
	No.	£	£	£	£	£	£	No.	No.	£
New South Wales	8,405	5,253,125	—	1,208,408	2,313,310	—	8,774,813	4,210	—	1,996,731
Victoria	5,395	3,371,875	350,000	6,592,500	—	—	10,314,375	4,253	2,097	5,750,371
Queensland	2,826	2,766,250	—	200,000	396,481	—	2,362,731	1,816	1,807	728,084
South Australia	1,729	875,000	205,625	625,000	1,190,000	—	2,895,625	1,071	450	614,058
Western Australia	2,000	1,250,000	125,625	500,000	750,000	1,000,000	3,625,625	2,600	—	1,166,097
Tasmania	500	312,500	128,000	360,000	—	—	800,500	1,556	50	980,375
Total	20,855	12,828,750	809,250	9,485,908	4,649,791	1,000,000	28,773,699	15,509	4,104	11,235,716

approximately 2,168 acres upon which to erect homes for soldiers under the provisions of the War Service Homes Act.

Also under the housing scheme a nurse, a returned soldier, a munition or war worker, a soldier's widow, or his dependant is entitled to a maximum advance of £800 for the purpose of acquiring a dwelling. According to the material of the house the period of repayment will vary. Principal and interest are repayable by annuity charges at the rate of 5 % per annum.

The last section of the Department of Repatriation — assistance — covers a very wide field indeed, medical treatment, maintenance rates, pensions, furniture, transport, etc. and we can only deal with those activities which most nearly concern us. The maintenance rates that may be granted to applicants awaiting fulfilment by the department of certain specified obligations are : (a) to a soldier without dependents a weekly income inclusive of pension of £2 2s. (b) to a soldier with a wife a weekly income inclusive of their combined pensions of £2 17s.

An additional allowance of 3s. 6d. per week is made for each child up to four, the maximum sum payable being £3 9s. per week. Those who are eligible for this benefit are applicants awaiting employment, approved applicants waiting to take up land, blind soldiers undergoing training, students receiving training in commercial or professional occupations, students in technical schools, convalescents and soldiers receiving medical treatment. The average total amount paid in maintenance allowance up to March 1920 was £8 5s. per man. The number of applications received for assistance other than vocational training and employment up to 30 June 1920 was 266,701 and the number approved 227,884.

The total assistance — general, loans and gifts — given by the Department of Repatriation from 8 April to 31 May 1920, amounted to £5,849,120; of this amount, £2,054,121 were expended in providing employment, including tools of trade and transportation expenses; £1,445,890 in vocational training; £15,766 in live stock and £129,528 in settlers' maintenance and other expenses. The remainder was spent in medical treatment, education, administration, etc.

Having given in outline the question of the repatriation of the discharged and returned soldiers in the Commonwealth of Australia, we intend to deal somewhat more fully with this question as regards soldier settlement on the land in each of the individual Commonwealth States.

(To be continued).

MISCELLANEOUS INFORMATION RELATING TO LAND SYSTEMS

AUSTRIA.

THE LAW ON THE REDEMPTION OF AGRICULTURAL HOLDINGS OCCUPIED IN TENANCY.

In connection with the agrarian legislation which during the last few years has regulated a whole series of important questions, a law was promulgated on 20 May 1921, for the purpose of revising the system of letting which had existed for a long time, and which, owing to the absence of regular agreement and to the existence of very antiquated customs, stood in urgent need of systematization. It was especially necessary to clear up those cases in which the tenant had erected buildings on his plot of ground. These, being built on soil not belonging to the owner of the house, were, so to speak, "in the air;" hence the expressions *Luftkeuschen* and *Luftkeuschenablosungsgesetz*.

The following are the essential points of this law. The ownership of farms which have been let without interruption for agricultural purposes, at least since 1 January 1880, and which form part of an estate exceeding the dimensions of a small farm (*Bauerngut*), must be transferred to the tenant, should he desire it, subject the payment of compensation, under the following circumstances:

(1) If previous to 1 January 1880, on the land in question, without opposition from the owner, buildings had been constructed for a dwelling house, with or without farm-buildings, provided that they are not the property of the owner, even if he have supplied the necessary materials *Luftkeuschen* or *Duckhütten*);

(2) If the circumstances made it appear that the letting of the land, and the permission to build the house, were originally intended to fix labour on the owner's land.

(3) If the tenant lives on the land which he rents, if he cultivates it with the help of his family, and if the average return serves essentially to provide for the needs of his domestic consumption. A change in the composition of the farm, which has occurred subsequently to 1 January 1880, does not hinder the redemption.

It is for the agrarian authorities to decide the question of redemption and the price. There is a right of appeal against their decisions.

FRANCE.

1. CONSOLIDATION OF HOLDINGS IN THE DEVASTATED REGIONS. — BLUM (Lucien): La reconstitution des pays dévastés. *Revue internationale du commerce, de l'industrie et de la banque*, Paris, September 1921.

Before the war the land in the devastated regions was excessively sub-divided. Thus in Aisne, of 66,000 holdings, 31,000 were under one hectare; in Nord the proportion was similar, 42,600 out of 86,500; in

Somme, of 69,674 holdings, 27,161 were less than one hectare, 30,198 were from one to 10 hectares, 10,652 from 10 to 49 hectares, and 1,663 over 40 hectares. Naturally, among the plots of less than one hectare there were some extremely small. At Bray-sur-Somme one land owner possessed 114 hectares divided into 300 plots; another at Guendecourt cultivated 27 plots amounting in all to 2 hectares; at Villers-Bretonneux the 372 hectares of one owner were divided into 660 plots, grouped into 190 separate blocks. In general, the division was such that there were between 3 and 4 plots per hectare. According to the law, the desire of one single landowner in a commune was sufficient to impose consolidation on the others, but persuasion was the method generally adopted. It is calculated that it will be necessary to consolidate the holdings in 150 communes of the Somme: 101 committees have been formed; 72 of these have demanded consolidation; 25, hoping to attain their object more rapidly, asked for the restoration of the old boundaries of property, but hitherto only 2 have obtained satisfaction, while 3 of the 72 communes in which consolidation is to be carried out have finished the work of redistribution. From the results obtained we can appreciate the benefits of the work done. In the commune of Villers-Carbonnel, 156 owners possessing 465 hectares divided into 846 plots have come to an understanding. There are now only 292 holdings. The average extent of each plot was 54 ares; it is now 160 ares. The average number of plots per owner was 5.4; it has been reduced to 1.8. One owner possessed 19 hectares in 23 independent blocks composed of 33 plots of ground; he now has only 2. The owner of Villers-Bretonneux referred to above has seen his 660 plots of ground united to make two holdings. There are no more holdings completely surrounded by others and the length of the roads has been shortened by 1,200 metres.

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2. AN OFFICIAL, EXPERIMENT IN HOMI COLONIZATION. — *La Main d'œuvre agricole*, Paris, June-July 1921.

In consequence of the rural exodus, there are in France lands uncultivated or imperfectly cultivated, while from Brittany, an over-populated country, many families of cultivators emigrate to Canada, because they cannot find a farm to work.

This condition of things, pointed out at the end of 1920 by the Departmental Office of Morbihan, attracted the attention of the Minister of Agriculture, who endeavoured, by publishing lists of Breton families and sending them to certain departments of the south-west, to create a current of emigration towards those districts.

Last February, before this attempt could produce any definite results, the intervention of M. Izizan, deputy for Finistère, when the budget was under discussion in the Chamber, led the Government to undertake more energetic action. Dordogne having been proved to be one of the departments which seemed to be suffering most from depopulation, the Under-

Secretary of State for Agriculture, through his Agricultural Labour Office, endeavoured to establish relations between Dordogne on the one hand and Finistère on the other.

In this latter department, in the absence of a Departmental Agricultural Labour Bureau, the Union of Syndicates of Finistère offered its help. In Dordogne a Departmental Agricultural Labour Bureau, established on 6 April 1921, declared itself ready to take up the question vigorously.

On 13 April the Agricultural Labour Office appointed an inspector at Périgord, who through the intervention of the Departmental Labour Bureau obtained credit to pay the expense of a preliminary journey of investigation for those Breton cultivators who should desire to settle in Dordogne and afterwards to defray part of the cost of permanent settlement. It was decided that a grant might be made of 100 francs for each person making the preliminary journey, and 500 francs for each family settling in Dordogne. The Agricultural Labour Office also obtained from the Under-Secretary of State a promise of 1200 francs to be placed at the disposal of three leaders of groups of Bretons, carefully chosen, to accompany and to pilot into Dordogne the cultivators from Finistère.

The financial difficulties having been overcome the journey had to be organized. At the headquarters of the Union of Syndicates of Finistère, 45 Breton cultivators registered themselves in May for the journey to Dordogne, which was fixed for the middle of June. It was arranged that these cultivators should form themselves into three groups in the centres of Landerneau, Chateaulin, and Quimper, according to the district to which they belonged, and that they should set out the same day under the direction of the leaders of the groups. The Agricultural Labour Bureau of Dordogne, for its part, undertook to seek out, to classify and to examine the farms to be disposed of, and at the same time to draw up a draft agreement for produce-sharing tenancies which might form a basis of discussion between the landowners of Périgord and the cultivators from Brittany. This draft agreement, while to a certain extent respecting local customs, embodied the modifications necessary to guarantee the interests of the future tenants. It was laid before both parties for consideration.

On 14 June, 37 natives of Finistère arrived at Périgueux. On the same day the Agricultural Labour Bureau of Dordogne met in order definitely to fix the agreement for produce-sharing tenancies, the draft of which had been submitted to them, and in which some modifications were made. It was also decided that to each leader of a group representing a district of Finistère, a district in Dordogne should be assigned, in which the leader in charge should endeavour to settle as far as possible the Breton families entrusted to his care. Thus centres of colonization were to be formed, which would be the more solid, the more compact they were. The following day, about a hundred landowners of Périgord presented themselves at the appointed meeting place. According to the district in which their estates were situated, they were put into communication with the leader of a group, who presented them to the cultivators from Finistère whom he was accom-

panying The demand exceeding the supply, there was competition for the Bretons, who that same day were able to begin their tour of investigation in company with the landowners. Meanwhile the leaders of the groups established themselves in a centre near the sphere of action of their compatriots, in order to be able in case of necessity to help them with advice.

This attempt was crowned with success ; before 28 hours had passed all the Finistère men had chosen a farm, and nearly all had made an agreement with a Périgord landowner. The draft agreement served as a basis for the arrangements, which differed according to circumstances. Many of the Bretons made an agreement for six years, or even for nine years, the tenant to have the power of cancelling it at the end of three years. Others, in the case of farms which had been neglected or required clearing obtained the right to the whole crops for one, two, or even three years, according to circumstances, the taxes only being at their expense. The greater number obtained from the landowner part payment of the cost of their household removal ; thus many were enabled to bring part of their live or dead stock from Brittany.

Some groups of families were formed in the north and north-east of the department of Dordogne : five families are installing themselves in neighbouring farms to the south of Nontron ; five others are settling side by side near Lanonaille ; four grouped themselves in the neighbourhood of Thenon. Other less compact groups were formed near Périgueux, Monpont, and Bugue. Lastly, three families are settling in the south of the department in spite of the efforts made to prevent scattering.

The installation of these families was expected for the end of September.

TUNIS.

AGRICULTURAL COLONIZATION IN 1921. — *Le Temps*. Paris, 4 October 1921.

The number of plots offered for sale by the Agricultural Department in 1921, was 128 ; viz. 109 medium-sized plots, 76 of which were reserved for local applicants and 33 for immigrants, 9 small plots, and 10 plots for assisted colonization, to be subsequently offered for sale.

If we add to these figures those for the years 1919 and 1920, we find that the Agricultural Department since the cessation of hostilities has settled 403 families on an area of about 80,000 hectares, of which 19,000 hectares have been allotted for planting in the South in 30 plots.

At the same time the acquisition of private property has been made easier for the native *fellaheen*. Thus lands containing more than 35,000 hectares have been allocated, or soon will be allocated, for their benefit, and a new and very extensive area will be placed at their disposal in the course of the years 1922 and 1923.

III. — MISCELLANEOUS QUESTIONS

AUSTRIA.

THE MEASURES ADOPTED FOR THE ENCOURAGEMENT
OF AGRICULTURE DURING THE WAR (1914 TO 1918)

By Dr. HERMANN KALLBRUNNER,

Agricultural Engineer

To give even a sketch of the measures adopted by the Austrian government for the encouragement of agriculture would now be extremely difficult ; to give a complete account of them would be quite impossible. Even now the effects of the war and of the dismemberment of the State are too persistent to allow of judging these measures or of fully estimating the results which they have produced. In view of many events, we are not yet in a position to say, even approximately, whether they will have lasting results, or whether all traces of them will pass away with the return of normal conditions. The rise of a series of States on the territory of the ex-Monarchy has much increased the difficulty of judgment, because of the diversity of the conditions of each of these. Some of the Government measures, though based upon circumstances which might seem permanent in character, are yet, unless we are much mistaken, destined to have but a short existence ; for instance the State regulation of cereals, which extended till it seemed almost a monopoly, but afterwards shrank to smaller and smaller proportions.

The want of reliable statistics is another difficulty in the way of giving a complete statement. There are but few sources of information, for the most part limited to a simple enumeration of laws and decrees, with few statistics, and these often doubtful. During the war there were as a rule no ample detailed reports, such as had previously been published by the Ministry of Agriculture and the Central Statistics Office. On some subjects which would have been of the greatest interest, such as the action of the military authorities with regard to cultivation, there

is absolutely no information. During the war period few figures were available, so that for the future it will be very difficult, if not absolutely impossible, to draw up correct statistics; and this will be a serious hindrance to any retrospective statement of the economic conditions existing during the war.

It seems to be especially necessary, for the understanding of the development of circumstances, to give a short preliminary sketch of agricultural production in Austria before the War and of the position of the country in regard to it, as this is the basis on which the war measures necessarily rested. In the second place, it will be necessary to explain clearly the fundamental principles by which the decrees and other measures were inspired, and which therefore had a powerful influence on the whole character of the policy of encouragement of production. Afterwards a statement will be given of the most important decrees and legislative measures as well as of their effects on production, in chronological order and, as far as possible, according to the different branches of agriculture.

§ I. THE CONDITION OF AGRICULTURE BEFORE THE WAR.

Austria and Hungary formed one united State, ruled by one supreme authority, but as regards their internal condition and in many aspects, the two countries were entirely distinct. Each had a Ministry of Agriculture with supreme administrative power, and the two Ministries were quite independent of each other. As at present, the organizations for promoting agriculture were differently formed. Thus in the government offices of the Crown countries which, taken together, formed the old Austria, were organizations the functions of which related exclusively to agriculture and forestry. To other bodies, the agricultural authorities, belonged the duty of providing for the carrying out of various plans, such as the consolidation (*Kommassierungen*) of agricultural estates, the division of public lands, and the care of alpine pasture districts.

The *Landeskulturräte* (provincial councils for cultivation) as being executive organs of the elective provincial administrations, had to provide for the carrying out of regulations relating to certain forms of agricultural improvement. At the district offices (*Bezirkshauptmannschaften*), the lowest grade of the State administration, there were forestry officials with ample rights of supervision over communal and private woods. To these offices, during the war, the supervision of agricultural production was also entrusted.

The agricultural societies, through their local sections, which were subsidized by the State, also sought, by lectures, by publications, by shows and by grants, to promote the improvement of the cultivation of the soil (1).

Many co-operative societies, with their federations, and schools of every kind, encouraged agriculture by facilitating the sale of produce, and

(1) See: GESCHICHTE DER ÖSTERRICHISCHEN LAND- UND FORSTWIRTSCHAFT UND IHRER INDUSTRIEN, 1848-1898, 5 volumes. Vienna 1899; HAUSLER, Die Entwicklung der k. k. Landwirtschaftsgesellschaft in Wien, während ihres hundertjährigen Bestandes. Vienna, 1907.

providing agricultural instruction (1). The schools are partly maintained by the State, partly by the autonomous provincial governments, and partly also by communes and associations.

In the school year 1912-13, there were 223 teaching institutions, with 2,004 teachers regularly instructing 8,860 pupils and actively conducting courses of lectures for a large circle of the agricultural population (2).

Compared with the total expenditure of the State, that which related to agriculture was comparatively small.

The total area of the old Austrian State, about 30 million hectares, was thus divided :

TABLE I. — *Distribution of Land.*

	Hectares	Per cent.
Land under crops	10,623,711	35.4
Meadows	3,070,772	10.3
Pasture, including mountain pastures (<i>Alpen</i>) (3).	4,050,908	13.5
Market gardens.	372,251	1.2
Vineyards	241,596	0.8
Forests	9,783,341	32.6
Lakes, ponds, unproductive land (exempt from taxes)	1,858,273	6.2

During the last ten years of peace, 1903 to 1912, the average area sown, and the produce from the different kinds of crop were as shown in Table II (page 615) (4).

The produce per hectare in the different regions, and even in different parts of the same region, varies greatly, according to diversities of climate, soil, and systems of cultivation. According to the *Österreichisches Statistisches Handbuch*, for every 100 persons over ten years of age the number of those who could neither read nor write in different regions was as shown

(1) See : *ÖSTERREICHISCHES STATISTISCHES JAHRBUCH*. Vienna ; FUHRER, *Das landwirtschaftliche Genossenschaftswesen in Österreich*. Vienna, 1912 ; KERBLER, *Das landwirtschaftliche Genossenschaftswesen in Oberösterreich*. Linz, 1903 ; *JAHRBUCH DES ZENTRAL-VERBANDES DER LANDWIRTSCHAFTLICHEN GENOSSENSCHAFTEN IN PRAG*. Various articles published in previous years in the *International Review of Agricultural Economics*. Reports of provincial governments. *Genossenschaftspress* (publication suspended in 1919).

(2) See : *ÖSTERREICHISCHES STATISTISCHES JAHRBUCH*, Vienna. *Österreichische landwirtschaftliche Unterrichtszeitung*, Vienna.

(3) By "Alpen" we understand mountain pastures, which can be utilized as such only for three or four months of the year. Their production is usually very small, and it ceases entirely in the higher regions, for which reason these latter are considered quite unproductive.

(4) See : *STATISTISCHES HANDBUCH DES K. K. ACKERBAUMINISTERIUMS FÜR DAS JAHR 1912*. Vienna, 1913.

TABLE II. — *Average Area Sown and Average Produce, 1903 to 1913.*

Crops	Area in hectares	Produce in quintals	Produce per hectare in quintals
Wheat	1,171,142	15,561,853	13.3
Rye	1,984,846	25,772,258	13.0
Barley	1,143,243	16,003,131	14.0
Oats	1,848,103	21,321,638	11.5
Maize.	330,890	3,977,359	12.0
Vegetables	276,765	2,774,651	10.0
Potatoes	1,251,775	128,570,784	102.7
Sugar beet	236,660	59,917,300	253.2
Beet for fodder	208,249	36,738,588	176.4
Clover	1,081,446	36,162,740	33.4
Fodder crops, green maize	224,943	6,541,357	29.1
"Eggärten" (1)	125,205	4,021,915	31.9
Meadows	3,070,372	—	(2) 28.7 (3) 8.6

in Table III (page 616), in which we also show the produce per hectare of rye and oats.

Of the 28,571,934 inhabitants enumerated in the census of 31 December 1910, 13,842,707 declared that they belonged to the occupational group of "agriculture, forestry and allied industries." Amongst these there were :

- 2,598,882 independent agriculturists including tenants ;
- 22,319 permanently employed labourers ;
- 1,335,091 day-labourers ;
- 3,930,937 members of a family sharing the work ;
- 5,291,319 persons whose occupation was not further defined ;
- 44,924 domestic servants.

The importance in Austria of agriculture as compared with other

(1) "Eggarten" are fields which for one or two years are sown to wheat, and then for several years are laid down to grass.

(2) Average production of meadows in the valleys.

(3) Average production of mountain meadows.

TABLE III. — *Relation between the Intellectual Condition of the Agriculturists and the Produce per Hectare.*

Regions	Percentage of illiterates	Produce in quintals per hectare	
		Rye	Oats
Lower Austria	2.4	14.4	11.3
Upper Austria	1.7	13.5	12.0
Salzburg	2.9	14.6	6.4
Styria	7.0	9.9	10.6
Carinthia	12.3	10.3	10.7
Tyrol	2.4	13.4	10.6
Vorarlberg	0.8	8.0	6.6
Carniola	12.2	7.0	9.6
Trieste	8.5	6.6	5.3
Gorizia	1.5	8.3	9.5
Istria	30.8	5.2	4.1
Bohemia	2.1	16.3	14.8
Moravia	2.9	14.3	12.5
Silesia	3.7	11.7	11.5
Galicia	40.6	10.3	10.2
Bukovina	53.0	13.0	13.7
Dalmatia	62.8	6.0	4.1

cupations is still more clearly shown by the following figures. Out of every 10,000 persons

4,845 were occupied in agriculture (1);
 2,627 " " in industry;
 1,239 " " in commerce and transport;
 1,269 " " in the public service, liberal professions, the army, or had no definite occupation.

The following figures show the distribution of agricultural holdings (2):

	Total number of holdings	Number of exclusively agricultural holdings
Holdings under 2 hectares	1,275,221	1,164,657
" from 2 to 5 hectares	792,415	614,403
" " 5 to 20 "	625,624	300,488
" " 20 to 50 "	127,828	22,276
" above 50 "	35,261	8,489

(1) See: *ÖSTERREICHISCHE STATISTIK*, New Series, Vol. 1, Nos. 1, 2, 3. — Vol. 2, Nos. 2, 3 — Vol. 3, No. 1. — Vol. 4.

(2) From *ERGEBNISSE DER LANDWIRTSCHAFTLICHEN BETRIEBSZÄHLUNG VOM JAHRE 1902*. Vienna, 1908.

The number of head of live stock, according to the census was (1) :
Horses, 1,802,848; calves less than one year old, 1,742,117; cows, 4,901,886; other cattle, 2,516,006; goats, 1,256,778; sheep, 2,428,101; pigs, 6,432,080.

For every 100 hectares of agricultural land there were 10 horses, 52 head of cattle, 7 goats, 4 sheep and 36 pigs.

Though, as we have seen, a large part of the population was employed in agriculture and this led to the system of protection being adopted which must have been fairly effective, nevertheless the country was not in a position to provide entirely for its own support. Large quantities of food had to be imported from Hungary, which was not separated from Austria by any customs barrier, and also from abroad (2).

The amount of the chief imports and exports of the Austro-Hungarian monarchy in 1913 is given below in thousands of crowns (3) :

TABLE IV. — *Imports and Exports of Agricultural Produce of Austria-Hungary in 1913 (in thousand of crowns).*

Produce	Imports	Exports	Excess of .	
			imports over exports	exports over imports
Wheat	3,186	442	2,744	
Rye	914	21	893	
Barley	995	34,058	—	33,063
Oats	1,045	1,004	931	
Maize	84,081	143	83,938	
Sugar	3,598	297,338	—	293,740
Vegetables	7,341	11,553	—	4,212
Flour	2,209	10,068	—	7,859
Rice	26,835	39	26,796	
Market garden produce	25,151	9,410	15,705	
Cattle	11,905	45,222	—	30,317
Pigs	7,441	177	7,264	
Horses	7,537	10,308	—	8,861
Fruit	21,395	39,212	—	17,817
Hops	1,960	30,493	—	37,524

(1) See: *WIRTSCHAFTSLEXIKON FÜR DIE IM REICHSRATH VERTRETENEN KÖNIGREICHE UND LÄNDER*. Nach dem Stande der Viehzählung vom 31. Dezember 1910. 3 volumes. Vienna, 1912; *MESSNER*, Die Viehproduktion und die Fleischversorgung Österreichs. Munich, 1915.

(2) There is an excellent book on the effects of customs duties on the production of cereals: *STRAKOSCH*, Die Grundlagen der Agrarwirtschaft in Österreich. Vienna, 1917. It also gives a clear exposition of the state of agriculture in Austria, and of the most important kinds of production.

(3) See: *STATISTIK DES AUSWÄRTIGEN HANDELS DES VERTRAGSZOLLGEBIETES DER BEIDEN STAATEN DER ÖSTERREICHISCH-UNGARISCHEN MONARCHIE IM JAHRE 1913*. Vienna, 1915.

This table shows how far the ex-Dual Monarchy was from being able to provide for supplying its people with wheat, maize, rice, market garden produce and pigs. It was equally unable to supply them with butter and other animal and vegetable fats. If we consider the exports from Austria to Hungary and from Hungary to Austria, we shall obtain a still more unfavourable view of the situation of Austria.

In the year 1913 the exports from Hungary to Austria and the exports from Austria to Hungary were as follow, in thousand of crowns :

TABLE V. — *Exchange of Agricultural Produce between Austria and Hungary (in thousand of crowns).*

Produce	Exports from Hungary to Austria	Exports from Austria to Hungary	Excess of	
			exports from Hungary to Austria	exports from Austria to Hungary
Wheat	113,522	809	112,713	—
Rye	45,173	75	45,098	—
Barley	35,304	574	34,730	—
Oats	20,794	2,060	18,734	—
Maize	24,321	792	23,529	—
Sugar	387	11,374	—	10,987
Vegetables	3,754	1,214	2,540	—
Flour	249,046	3,334	245,912	—
Rice	12,911	2,362	10,549	—
Fruit	10,633	5,397	5,236	—
Market garden produce	11,558	1,123	10,435	—
Cattle	146,072	2,800	143,272	—
Sheep	3,023	54	2,969	—
Pigs	128,989	19	128,970	—
Horses	19,109	872	18,236	—
Game	24,353	286	24,067	—
Milk	11,427	695	10,732	—
Eggs	16,569	228	16,341	—
Butter	7,727	942	6,785	—
Bacon	15,823	134	15,689	—
Lard	10,011	89	9,922	—
Meat	19,896	3,064	16,832	—

Recapitulating, it may be stated that production in Austria, even in the favourable condition that prevailed before the war, was far from sufficing for the food requirements of the people, and that even the Hungarian contributions were insufficient to supply the deficit.

It would also be easy to demonstrate from statistics referring to the use of machinery and other requisites that production was in a comparatively backward state of development, and was dependent largely on the assistance of human and animal labour.

§ 2. MEASURES ADOPTED DURING THE WAR (I).

The mobilization of the Austrian army from an agricultural point of view took place at a most unfavourable moment. In the colder districts in the mountains the harvest had not even begun when unexpectedly the best labour power was called to the Colours and a large number of draught animals was requisitioned for the army. In order to finish the harvest with the limited labour available and at the same time to ensure the preparatory labour for the autumn sowing, which in Austria begins in the early days of September, it was necessary to take measures at once.

(a) *Measures for Intensifying Production.* — Special Harvest Commissions (*Erntekommissionen*) were appointed under a Decree of 5 August 1914 (*Reichsgesetzblatt*, No. 200) and another of the same date (*R. G. Bl.*, No. 199), by which the Government was authorized to issue decrees in the interest of the public economy without the sanction of the elected legislative bodies. These Commissions were to act in all the agricultural communes.

They were to be composed of from 3 to 7 trustworthy persons resident in the commune such as clergymen, school managers and schoolmasters, and officials of agricultural organizations.

The chief man of the commune (*Gemeindevorsteher*) was to act as president. One of the duties of these Commissions was to carry out all the measures necessary for the early gathering in of the harvest, and for ensuring the sowing in the best way possible. With this object all persons of both sexes resident in the locality might be obliged to give their work on those farms which most needed help. The decree was completed by another of 25 September 1914 (*R. G. Bl.*, No. 252), which empowered the Harvest Commissions to assign draught animals and the implements required for cultivation to those farms which, owing to mobilisation and requisitions, were not in a position to get through the work in time. As the days passed, these measures were perfected and extended. Of special importance were the Decrees of 15 February 1915 (*R. G. Bl.*, No. 38) and

(1) For sources, see: (1) DENKSCHRIFT ÜBER DIE VON K. K. REGIERUNG AUS ANLASS DES KRIEGES GETROFFENEN MASSNAHMEN. Bis Ende Juni 1915. Vienna, 1915. — (2) II. Teil. Juli bis Dezember 1915. Vienna, 1916. — (3) III. Teil. Januar bis Juni 1916. Vienna, 1917. — (4) IV. Teil Juli 1916-Juni 1917. Vienna, 1918. — (5) Gesetze, Verordnungen und Kundmachungen aus dem Dienstbereiche des bestandenen k. k. Ackerbauministeriums. 48. Heft. Vienna, 1920. — (6) *Das Reichsgesetzblatt*, of the years 1914 to 1918 (referred to by the abbreviation *R. G. Bl.*) — (7) STATISTISCHE JAHRBÜCHER DES K. K. ACKERBAUMINISTERIUMS, for 1913 and following years. Vienna. — (8) ANBAUFLÄCHEN UND ERNTEERGEBNISSE IN ÖSTERREICH, for 1916 and following years. — (9) ANBAUFLÄCHEN UND ERNTEERGEBNISSE IN GEBIETE DER REPUBLIK ÖSTERREICH IM JAERE 1918. Vienna, 1919.

of 3 March 1915 (*R. G. Bl.*, No. 55) by which all landowners were obliged to sow their fields. Those which remained uncultivated were to revert to the commune to be utilized, and should the commune be unable to undertake them, they were to be handed over to others. The Harvest Commissions were also obliged to provide, throughout the district under their care, for the intensive utilization according to season of all meadows, pastures, and mountain lands appropriated to the production of fodder crops. By the Decree of 6 May 1915 (*R. G. Bl.*, No. 111) they were also required to assist the owners of pasture land and to hand over to the communes for working and utilizing, such land as, notwithstanding the help given, should remain unutilized on 30 June. In such a case the communes might take the necessary measures for securing the use of the pasture, such as the construction of fences, drinking-troughs, sheds for grazing cattle, etc. The owner would have no claim to compensation, except for damage not directly connected with the utilization of the land.

Among the regulations issued during the first year of the war, one of local importance should be mentioned. The production of sugar in Austria being excessive, owing to the impossibility of exporting the usual amount, and the available quantity of cereals being quite insufficient, an attempt was made to limit the cultivation of sugar beet with a view to a larger sowing of cereals. The same circumstance decided the passing of other measures, especially in relation to the production of forage crops, of which we shall speak presently.

The Decree of 20 February 1915 (*R. G. Bl.*, No. 40) enacted that owners of land who were obliged by contract to cultivate sugar beet must sow only 70 per cent. of the area which they had contracted to cultivate, while the remaining 30 per cent. must be devoted to potatoes or cereals.

In order to extend the area sown to cereals, which in some districts was too small, the authorities by which the State forests are administered were enjoined by a Decree of 29 January 1915, No. 2682, to cede gratuitously to small cultivators for three years all tracts of land adapted for cultivation. Private owners of forests lands were requested to follow this example.

By the Decree of 21 October 1915 (*R. G. Bl.*, No. 317) followed by others of 11 October 1916 (*R. G. Bl.*, No. 352), of 26 February 1917 (*R. G. Bl.*, No. 74) and 10 April 1917 (*R. G. Bl.*, No. 161) efforts were made to utilize unproductive land, especially building land in the vicinity of towns. Here chiefly were laid out small market-gardens, called *Schrebergärten* from the name of Dr. Schreber, a physician of Leipsic, who suggested the idea (1).

Since it often happened that there were lands which would not produce any real return from cultivation, a Decree of March 1916 (*R. G. Bl.*,

(1) See an article on "The Development of Small Garden Unions during the War" in the *International Review of Agricultural Economics*, of March 1920.

No. 59) provided that all lands "adapted for cultivation" should be sown, while preceding decrees had spoken of all lands in general (1).

At the same time the Harvest Commissions were directed to lay before the civil authorities every circumstance which might require special measures on the part of the Government, thus ensuring to the Commissions a certain influence on legislation.

A Decree of 23 February 1916 (*R. G. Bl.*, No. 53) regulated for that year, in the same way as for the year before, the utilization of all land adapted for growing forage crops or for pasture. Subsequent measures, still partly in force, such as that of 18 March 1918 (*R. G. Bl.*, No. 102), extended these regulations to the following years. Other measures referred in like manner to the utilization of uncultivated lands, building land, etc., in each case for the duration of a year.

To preserve crops from malicious damage, pre-existing laws were strengthened by a Decree of 11 July 1918, and power was given to inflict heavy fines.

To obtain an increased agricultural production, many measures were adopted to offer inducements to the farmers, but they were only applied to a limited extent. Particularly worthy of notice were the grandiose plans for the systematic improvement of large tracts of land which gave rise to the formation of the *Deutsches Meliorationsverband* in Bohemia (27 February 1917). This body, after inquiries made, was able to show that about 25 per cent. of the area of Bohemia was capable of improvement, and that if the necessary works were carried out it might produce 50 per cent. more (2).

Similar inquiries were made in other provinces (3). It is certain that the need of food-stuffs and the increased value of all the produce of the soil attracted general interest to the subject and to the best way of increasing production.

The same causes led to the formation of the *Deutsche Landwirtschaftsgesellschaft* (15 October 1916). This association, following the example of the *Deutsche Landwirtschaftsgesellschaft* of Berlin and of the similar association in England, proposes to promote agriculture in every part of the country without having recourse to State aid, to help its members with advice and practical assistance, whether by facilitating the relations between supply and demand, or by practical ideas imparted through the weekly paper *Mitteilungen*, by circulars and pamphlets. One section of the Association takes up questions relating to the cultivation of plants,

(1) According to the statistics of the Ministry of Agriculture, uncultivated tracts, and those in which grass only was grown ("Eggärten") increased largely during the war, a natural result of the insufficiency of labour. From 1903 to 1912 the average area of uncultivated land in Lower Austria was 42,403 hectares and in 1918 it was 243,531 hectares. At the same time the extent of the "Eggärten" rose in Carinthia from 10,871 to 29,659 hectares. It was the same in other provinces. Elsewhere conditions were somewhat better, except in districts which had suffered directly from the war.

(2) See: JOSEF KUNHEIL, *Volksernährung und Bodenmeliorationen*, Prague, 1917.

(3) See: SKODA, *Zur Forderung des Meliorationswesens in Tirol*, in *Ingenieur und Architektenversammlung*, No. 46. Vienna, 1920.

another, cattle raising, advice on fiscal subjects, building, etc. The implement section gives advice to members about purchasing machines and implements, working gratuitously for them as intermediary. It also assists in the purchase of other requisites. The society organizes new researches and new methods of cultivation, and urges its members to make systematic observations. Twice a year meetings are held for the discussion of interesting questions (1).

Industrial firms and others have often adopted special measures for increasing production, buying or renting land for the purpose of making better provision for feeding their own workmen. These *Industriegüter* generally adopted the best means of attaining their object; they are for the most part well managed, and owing to the employment of a large working capital, they can supply great quantities of food-stuffs. Lands formerly belonging to mills have often been changed into *Industriegüter*, when the mills have been purchased by industrial undertakings for the utilization of water power.

The formation of the association *Allgemeine Nährpflicht* is interesting, because it originated in the project of the social reformer Popper-Lynkens, which was to induce all men to work for two or three years on land belonging to them collectively, in return for which every one was to be gratuitously provided for life with food, clothing, lodging and medical care.

(b) *Measures for Protection against Plant Diseases and against Vermin.* — Closely connected with the efforts to promote production are those intended to protect plants in the best possible way from damage caused by disease.

Immediately after the outbreak of the war greater attention was given to the question of the protection of plants, and special efforts were made to place at the disposal of farmers all the necessary materials, which during the war naturally became increasingly difficult to procure. This was especially the case with sulphate of copper, used in immense quantities for vines. It was generally replaced by *Perocid*, a sulphate produced in Austria from some rare earths which, previous to the war, had been tried and had given excellent results. By a Decree of 28 August 1915 (*R. G. Bl.*, No. 352) the production of *Perocid* was placed under State control, in order to eliminate as far as possible unnecessary middlemen; by a Decree of 28 September 1915 (*R. G. Bl.*, No. 292) all the sulphate of copper in the country was requisitioned, and in 1915 the Government succeeded in ensuring a considerable amount of this product.

Sulphur used against oidium presented still greater difficulties, because it was all absorbed by the requirements of the military administration. The substitutes put on the market had to be previously examined by the State experiment stations. To a certain extent recourse was had to sulphur obtained in the process of purifying gas.

(1) See: *Jahresberichte der Deutschen Landwirtschaftsgesellschaft für Österreich*, Vienna, 1918 (for 1917), and 1919 (for 1918); besides *Nachrichten*, the works published in the form of pamphlets, calendars and communications.

Protection was needed against other pests. Field-mice were destroyed as far as possible, as well as certain widely distributed weeds.

Special efforts were made to combat the olive fly in Dalmatia, and also in Montenegro and in Albania, which were then occupied. By a Decree of 3 July 1917 (*Landesgesetzblatt*, No. 116) the *corvus frugilegus* was included among birds which were harmful within the meaning of the law for the protection of birds, and consequently its destruction was permitted.

In order to restrict as far as possible the often serious damage caused even in time of peace by game, measures were taken to encourage their being killed.

In the last two years of the war the vine-growers were provided with incomparably better means of combating mildew, which must have contributed largely to the fact that the vintage for both years was excellent as to quantity and quality. But in some districts it was difficult to obtain the slacked lime required, as is well known, with sulphate of copper to make the Bordeaux mixture. By supplying explosives for quarrying the limestone, and coal for burning it, this deficiency was in many cases made good.

The improved supply of sulphate of copper was of great importance, because in 1917 owing to the exhaustion of the stocks of raw material the production of *Perocid* was suspended. The paste *Bosna*, containing copper was also extensively used as a substitute for sulphate of copper.

As in the course of the war the supply of sulphur became more and more inadequate, and the small available quantities were required for the sulphuration of casks, hyposulphite of sodium was used in 1917 and 1918.

(c) *The Supply of Fertilizers.* — Various measures were adopted in regard to the supply of fertilizers.

In 1914, while the quantity available was still sufficient, and there was reason to fear that farmers had to a certain extent diminished the use of fertilizers, the Ministry of Agriculture tried to show landowners the necessity of using them. At the same time efforts were made to increase the production, especially of nitrogenous fertilizers. By a Decree of 18 January 1915 (*R. G. Bl.*, No. 13) factories producing fertilizers of this kind were obliged to place a certain portion at the disposal of agriculturists.

The scanty production of basic slag was encouraged as much as possible, and the price of all phosphatic fertilizers was for the first time regulated by a Decree of 31 July 1915 (*R. G. Bl.*, No. 224). The distribution was gradually withdrawn from private trade, and entrusted to the Federation of Agricultural Co-operative Societies, which endeavoured to effect it according to uniform rules (Decree of 31 July 1915, *R. G. Bl.*, No. 274). By a Decree of 11 March 1916 (*R. G. Bl.*, No. 136), the object of which was to unify the trade in bone manure, the *Knochenzentrale* was formed, to which all the available supply was to be notified, and to which was entrusted all the trade in bones, bone-fat and bone-meal. The principles to be observed in their distribution were partly fixed by the Ministry of Agriculture and Industry, and partly by the Decree of 49 June 1916 (*R. G. Bl.*, No. 205). The prices were regulated by the Decrees of 11 May

and 29 June 1916 (*R. G. Bl.*, Nos. 137 and 206) according to the amount of phosphoric acid and nitrogen contained in the fertilizers.

In the course of the war the available quantity of bones continually diminished. In the first place the consumption of meat perceptibly lessened, and then the breeders, owing to the scarcity of concentrated cattle feeds, used ground bones more extensively for feeding poultry and pigs. Through the systematic search made by the Government for phosphatic fertilizers, large deposits were found in the limestone mountains, where they had been formed and preserved in great caverns. The *Höhlendünger* (cave manures), must have been chiefly formed of the remains of the skeletons and the excretions of animals long since dead. The working of these deposits was immediately begun. They were estimated at about a million quintals, and were for the most part difficult of access. Their utilization was forbidden to private persons, and reserved exclusively for the State by a Law of 21 April 1918 (*R. G. Bl.*, No. 161).

Interest was naturally aroused in the great deposits of phosphates in foreign countries, and a common action was planned among all the countries which did not possess such deposits (1).

Nor was it possible for the supply of potassic fertilizers to continue under more favourable conditions than that of phosphates. They were the more needed because of the great quantities of hay and straw sent to the front, thus in a great measure depriving the soil of this plant food. The possibility of obtaining those potash salts which were generally to be had during the war was obstructed by the financial authorities, who, in the interest of the salt monopoly, permitted only the importation of salts containing less than 50 per cent of kitchen salt. The decree of 6 April 1918 (*R. G. Bl.*, No. 136) raised the limit to 70 per cent.

(d) *Measures relating to Labour.* — The scarcity of labour was that from which agriculture suffered most, and many measures were adopted to attenuate it.

The first of these were promptly passed in 1914, when, as we have already stated, Harvest Commissions were appointed to intervene and to send help to farms where the want of labour was felt (Decree of 5 August 1914, *R. G. Bl.*, No. 200). According to this decree a Labour Bureau was formed at the Ministry of Agriculture, with provincial offices in all the Crown countries, and district offices (*Landesarbeitsnachweisstellen* and *Bezirksarbeitsnachweisstellen*) depending upon it. The largest operations were those connected with placing agricultural labourers from the evacuated parts of Galicia on farms in the interior. While these labourers (who, however, soon returned to their own country) were usually sent to large farms, the prisoners of war, having at first worked in gangs of 20 or 30 men, each under special supervision, were also distributed individually or in very small groups, among small farms.

In special cases, particularly during the last period of the war, when

(1) See No. 19 of the year 1920 of the *Nachrichten der Deutschen Landwirtschaftsgesellschaft für Oesterreich*, of Vienna.

because of the general scarcity and the continued serious want of labour, the management of small farms became more and more difficult, independent agriculturists were released from military service for longer or shorter periods, in order to ensure the crops and the sowing. Several special classes of agricultural labourers, such as threshing machine attendants, drivers of motor or steam ploughs, blacksmiths, cartwrights, mountain shepherds, etc., were also released for periods of different duration. Here and there soldiers of the army in the field were formed into gangs of labourers and placed at the disposal of rural communes for work of this kind.

The hours of school attendance were shortened so that the older boys might help in agricultural work, and long holidays were given to boys of from 12 to 14 years of age. Examinations were facilitated for pupils attending the middle schools who helped with field labour in their holidays, and efforts were made to induce them to give such help.

In the course of the war some cases having occurred of soldiers' relatives who received government assistance under the Law of 26 December 1912 (*R. G. Bl.*, No. 237) and then refused to help in agricultural labour, a Decree of 15 February 1915 authorized the Harvest Commissions to oblige such persons to work, provided that they were physically fit, and that their family circumstances allowed of their working away from home.

When the number of prisoners of war was continually increasing, and they were assigned also to sugar refineries and forestry administrations, it became necessary to place them under the civil authorities, who were obliged to settle all difficulties inherent in employing them.

Very serious conditions presented themselves with regard to forestry. The specialized labour was nearly all under arms, and prisoners of war, ignorant of silviculture, could give little help. The need of timber being enormous, and continually increasing, eight military commands formed gangs of woodmen, who were sent by the agricultural labour bureaux to give their labour where it was required. These groups consisted exclusively of specialized workmen, partly drawn even from the front lines.

For works of improvement, which during the war could of course only be carried out to a small extent, prisoners of war were utilized; thus in Lower Austria and Carinthia they were employed on drainage works, and in Carinthia also for the improvement of alpine pastures, in Styria for the construction of six roads and for the improvement of two pastures; in the Tyrol for five roads, etc. (1).

In some cases a sort of exodus from the cities was observed, a phenomenon precisely contrary to the rural exodus. Food conditions in the towns becoming increasingly difficult, many sought work, temporary or permanent, in the country, in the hope of being able to provide better for themselves. They preferred to carry their contribution of labour into the country, often for no more than ten days, and to return in the

(1) See: PANTZ, Die Erfolge der Kriegsgefangenenarbeiten bei den agrarischen Operationen in den Jahren 1915-1917, in *Wiener landwirtschaftliche Zeitung*, 25 January 1919.

evening to their homes with their wages paid in kind. Large proprietors often succeeded in this way with only a very reduced staff in gathering in their potato crop.

(e) *Measures relating to Draught Animals.* — In order to obviate at least to some extent the extreme scarcity of draught animals several measures were adopted. The deficiency was directly dangerous for many farms; there were some which in a short space of time had been obliged to deliver up 90 per cent. of their draught animals. In the requisition of horses made in the autumn of 1914, sugar refineries, which of course especially require dray horses, were to some extent spared. Animals not adapted for military service, and especially those coming out of hospitals, were assigned to agriculturists who needed them most, but they were often again requisitioned when their state of health improved. In order to remedy at least in part the deficiency of draught oxen which was specially observable in districts where breeding was not carried on, the General Austrian Cattle Trade Company (*Allgemeine Österreichische Viehverkehrsgesellschaft*) procured cattle to be distributed among agriculturists who were most in need. At the same time where possible, stallions were lent to farmers, and mares belonging to the military department were sent to breeders who were obliged to care for the foals and return the mares.

In the course of the war these measures were continued in a sufficiently uniform manner. The foals of military mares especially were consigned to farmers, thus facilitating to a certain extent the replacing of their horses. Up to the end of 1917, 10,483 horses fit for military service and 12,870 foals were distributed.

(f) *Production and Distribution of Agricultural Machines.* — In order to remedy at least in part the scarcity of labour power both human and animal, the production and distribution of agricultural machinery was encouraged. First through the Harvest Commissions, and afterwards through administrative offices, the owners of utilizable machines, more especially of motor ploughs and threshing machines, were requested to lend them to other farmers. At the same time grants were made to necessitous farmers who wished to buy seed distributors in order to economize the seed. By a Decree of 19 June 1915 (*R. G. Bl.*, No. 166) makers and sellers of agricultural machines were obliged to furnish a list of their stock of reaping and threshing machines for the information of farmers desirous of buying.

When in 1915 a scarcity of material began to be manifest, and the available quantities were placed under State control, special care was taken that machine factories should be kept in full efficiency.

As the military authorities undertook the task of placing under cultivation the zones lying immediately behind the front, which were deserted by the civil population, they also frequently purchased machines.

Serious difficulties arose with regard to furnishing agriculture with coal, lubricants and benzine, only surmounted when Eastern Galicia was liberated, and Austria could again supply herself with petroleum.

By Decrees of 18 December 1915 and 29 April 1916 (*R. G. Bl.*, Nos. 377

and 127), the distribution of mineral oils and their products was regulated, and every possible consideration given to the requirements of agriculture, but the quantities available were so limited that the demands could be satisfied only to a very small extent. The supply of petroleum for lighting was particularly inadequate so that many had not even light for the most ordinary stable work and much inconvenience was thus caused.

In 1916 the Government purchased an immense quantity of Manilla hemp, and for some time part of the material required for pressing and stacking straw was thus supplied.

Towards the end of 1916 certain qualities of iron became scarce, and its consumption was placed under uniform rules by a Decree of 31 January 1917 (*R. G. Bl.*, Nos. 43 and 44). In this respect also the manufacture of agricultural machines was specially privileged. In the spring of 1917 a consultative committee was appointed to advise the Ministry of Agriculture on all questions connected with agricultural machines. It was composed of representatives of the Higher School for the Cultivation of the Soil (*Hochschule für Bodenkultur*), of agricultural organizations, and of manufacturers of machines.

With the great diminution of the production of coal, absorbed primarily by the requirements of war industries, there was also a diminution of the fuel available for working the various agricultural machines, which therefore often remained useless. By a Decree of 19 September 1916 (*R. G. Bl.*, Nos 323 and 324), the distribution of the small quantities of benzine and benzol assigned to agriculture was entrusted to the Ministry of Agriculture. Owing to the deficiency of requisites for lighting and heating many farmers, where the want was felt, supplied themselves with power from electric works, which was very costly during the war, but which enabled them to carry on their work as usual, even from early in the morning until late in the evening.

(g) *Measures for Encouraging Market Gardening and Fruit Growing.* — Not only were measures taken for the development and continuation of agricultural production in general, but also for special branches of production.

In particular, the raising of vegetables, owing to the scarcity of bread-stuffs, was destined to become increasingly important, inasmuch as vegetables grew more and more important as an article of food. It must also be remembered that previously the industrial centres consumed large quantities of early vegetables from Italy, and when the frontier was closed home production had to replace them.

Even in 1914 the cultivation of vegetables, especially in the neighbourhood of Vienna, was encouraged by a vigorous propaganda. Large areas were specially reserved for the cultivation of spinach. In the Southern provinces there was a more extensive cultivation of potatoes and early onions. Vegetables were preserved in various ways, especially by desiccation, but the renewal of nurseries of fruit-trees was entirely neglected. Empty spaces were not filled, but devoted to the raising of vegetables. Thus there was great scarcity of fruit trees after the war.

We have already spoken of the development of areas devoted to market gardening, especially in the vicinity of towns, in connection with the Decree of the 21 October 1915. But all these new kitchen-gardens had to be provided with seed, and the necessity became the more urgent, because before the war Germany had supplied most of the seed and she now restricted and sometimes forbade its exportation.

Some centres did excellent work in establishing nurseries for vegetables, often in greenhouses which had previously been merely a luxury, and handing them over to small cultivators. In this respect the Commune of Vienna set an example, letting large tracts of land under the best possible conditions, supplied with fences and water-pipes.

The Decree of 16 March 1917 (*R. G. Bl.*, No. 118) was of great importance, because it provided that for small gardens no rent should be paid higher than the average sum paid during the period from 1 October 1913 to 30 September 1916 for gardens equal or similar in the same district. This was intended to prevent speculation or the taking advantage by proprietors of small cultivators. At the same time a measure was passed to protect small cultivators from being dispossessed of their land except in specially important cases. The court of first instance was empowered to decide disputes as to raising rents and also to declare whether a small plot of ground should be considered a *Schreibergarten* or not.

This measure remained in force up to the end of 1918, when it was merged in the "Regulation for the Protection of Small Tenants," (*Vollzugsanweisung über den Schutz der Kleinpächter*), contained in the Official Gazette, No. 589, of 18 December 1918, which similarly protects the interests of other small tenants.

In the first years of the war liberty to trade in fruit and vegetables was maintained, especially because of the very perishable nature of these products, but in 1917 this trade was centralized, in accordance with certain rules drawn up the year before, on the subject of maximum prices and trade limitation. Thus for instance, a Decree of 6 September 1916 (*R. G. Bl.*, No. 290) fixed the maximum price of fresh and dried plums, and of preserved plums, and at the same time a syndicate was formed of the German and Czech Central Societies of Bohemia for trade in plums. The Law of 25 October 1916 (*R. G. Bl.*, No. 372) made way-bills (*Transportscheine*) compulsory for the carriage of apples (1).

An office for regulating the sale of vegetables was established by a Decree of 22 April 1917 (*R. G. Bl.*, No. 127) under the denomination of *Vom K. K. Amte für Volksernährung autorisierte Gemüseeund Obstverwertungsstelle* (*Geos*). It was to obtain the produce in the open market and arrange for its being uniformly distributed, as well as to promote fruit cultivation and market-gardening, and to facilitate the supply of seed and requisites of every kind. Attached to the "Geos" was a scientific and statistical section.

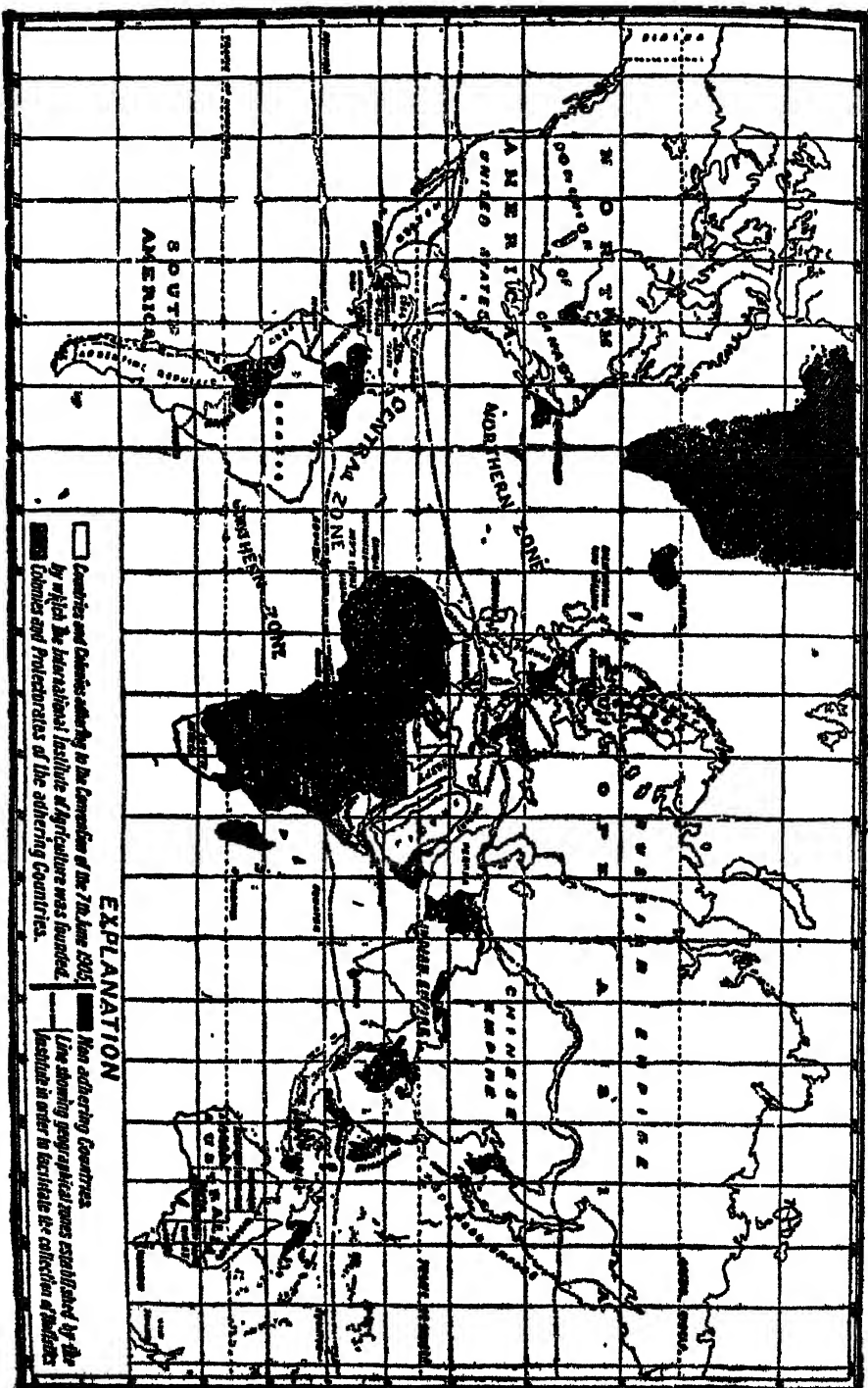
(1) By a Decree of 20 February 1917 (*R. G. Bl.*, No. 65) way-bills (*Transportscheine*) were introduced also for beet-root seeds and vegetable seeds.

Contracts of special importance for agriculture were concluded with producers, obliging them to devote certain plots to various kinds of vegetables, and to take the crop to the nearest railway station. The producer was to be responsible for the gathering and the packing. The *Geos* in its turn undertook to receive all the produce at the prices fixed, graduated according as the consignment took place before or after the date fixed. The preservation of vegetables was thus compensated by special additions to the prices (1).

Other contracts were made with agriculturists by which they were obliged to produce vegetable seeds. Great importance was attached to obtaining seed from good plants of pure varieties. Every seed supplied was to be examined at the seed-control station at the expense of the Central. The agriculturist was obliged to accept reduction in the price if 25 per cent. of the seed was incapable of germination.

(To be continued)

(1) See : HALBAN, *Kriegswirtschaftliche Verfügungen auf dem Gebiete der Gemüse- und Obstversorgung*, Vienna, 1918. FUERBERGER, *Die Ernährungsvorschriften Deutschosterreichs*, Vienna, 1919.



EXPLANATION

- ☐ Countries and Colonies where the International Institute of Agriculture was founded.
- ☐ Non adhering Countries.
- ☐ Lines showing geographical zones established by the Institute in order to facilitate the collection of statistics.

INTERNATIONAL INSTITUTE OF AGRICULTURE
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THE INTERNATIONAL INSTITUTE OF AGRICULTURE

ORIGIN OF THE INSTITUTE AND SUMMARY OF THE INTERNATIONAL TREATY

The International Institute of Agriculture was established under the International Treaty of 7 June 1905, which was ratified by forty governments. Nineteen other governments have since adhered to the Institute.

It is a Government institution in which each country is represented by delegates. The Institute is composed of a General Assembly and a Permanent Committee.

The Institute, always confining its attention to the international aspect of the various questions concerned, shall :

(a) collect, study and publish as promptly as possible, statistical, technical, or economic information concerning farming, vegetable and animal products, trade in agricultural produce, and the prices prevailing in the various markets ;

(b) communicate the above information as soon as possible to those interested ;

(c) indicate the wages paid for farm work ;

(d) record new diseases of plants which may appear in any part of the world, showing the regions infected, the progress of the diseases, and if possible, any effective remedies ;

(e) study questions concerning agricultural co operation, insurance and credit from every point of view ; collect and publish information which might prove of value in the various countries for the organization of agricultural co-operation, insurance and credit ;

(f) submit for the approval of the various governments, if necessary, measures for the protection of the common interests of farmers and for the improvement of their condition, utilizing for this purpose all available sources of information, such as resolutions passed by international or other agricultural congresses and societies, or by scientific and learned bodies, etc

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PRINCIPAL WEIGHTS, MEASURES AND MONEY OF THE VARIOUS COUNTRIES AND THEIR BRITISH EQUIVALENTS ---

1 Cadastral arpent (Hungary)	=	1.42201	acres
1 Centimetre	=	0.393715	inches
1 Cho (60 ken) (Japan)	=	119.30327	yards
1 Crown 100 heller (Austria-Hungary)	=	10 d.	at par
1 Crown (100 öre) (Denmark, Norway, Sweden)	=	15.1 $\frac{1}{8}$ d.	at par
1 Deciatine (2 tchetwert, (Russia)	=	2.69966	acres
1 Dinar, gold (100 para) (Serbia)	=	933/64 d.	at par
1 Dollar, gold (\$) (100 cents) (United States)	=	45.5/16 d.	at par
1 Drachm, gold (100 lepta) (Greece)	=	933/64 d.	at par
1 Egyptian Kantar	=	99.0498	lbs.
1 Feddan Masri (24 Kirat Kamel) (Egypt)	=	1.03805	acres
1 Florin, gold, or Guilder (100 cents) (Netherlands)	=	15.753/64 d.	at par
1 Franc (100 centimes) (France)	=	933/64 d.	at par
1 Gramme	=	0.03527	oz.
1 Hectare	=	2.47109	acres
1 Kilogramme	=	2.2	lbs.
1 Kilometre	=	1093.613	yards
1 Kokou (10 To) (Japan)	=	1.58726	quarts
1 Lei, gold (100 bani) (Rumania)	=	983/64 d.	at par
1 Leu (100 stotinki) (Bulgaria)	=	933/64 d.	at par
1 Lira (100 centesimi) (Italy)	=	933/64 d.	at par
1 Litre	=	0.21998	gallons
	=	0.0275	busbels
1 Mark (100 Pfennige) (Germany)	=	11 3/4 d.	at par
1 Mark (100 penni) (Finland)	=	933/64 d.	at par
1 Metre	=	3.28084	feet
1 Milreis, gold (Brazil)	=	25.261/64 d.	at par
1 Milreis, gold (Portugal)	=	45.519/64 d.	at par
1 Peseta, gold (100 céntimos) (Spain)	=	933/64 d.	at par
1 Peso, gold (100 centavos) (Argentina)	=	35.1137/64 d.	at par
1 Pound, Turkish, gold (100 piastre) (Ottoman Empire)	=	185.015/64 d.	at par
1 Pund (Sweden)	=	0.93712	lbs.
1 Quintal	=	1.96843	cwt.
1 Rouble, gold (100 kopeks) (Russia)	=	25.1 3/8 d.	at par
1 Rupee (16 annas) (British India)	=	$\frac{1}{10}$	of £1 (gold)
1 Talar (20 piastre) (Egypt)	=	45.111/32 d.	at par
1 Verst (Russia)	=	1166.64479	yards
1 Yen, gold 2 fun or 100 sen) (Japan)	=	25.037/64 d.	at par
1 Zentner (Germany)	=	110.23171	lbs.

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Part I: Co-operation and Association

FRANCE.

THE MEASURES ADOPTED SINCE 1914
TO ENCOURAGE AGRICULTURAL CO-OPERATION

To form an exact appreciation of the measures adopted in France since 1914 to encourage agricultural co-operation, it must be borne in mind that, except in the case of co-operative societies for mechanical cultivation and of mutual agricultural insurance societies, the State knows nothing of agricultural co-operative associations except through the regional credit banks, one of the express objects of which is "to transmit to agricultural co-operative societies, agricultural syndicates, and other associations, such special advances as may be made to them by the State."

The members of agricultural credit banks are not only individuals. These banks also admit the following organizations to membership :

1. Agricultural co-operative societies formed for the purpose of carrying out or facilitating all operations connected with the production, manipulation, preservation or sale of agricultural produce, derived exclusively from the members' farms ;
2. Co-operative societies for the joint purchase and supply of requisites ;
3. Agricultural syndicates and similar associations formed exclusively for an agricultural purpose ;
4. Agricultural societies, the object of which is to carry on the manufacture of all articles, products, or implements required in agriculture, to execute agricultural works of public utility, to provide a district or a rural community with modern installations of public utility, such as abat-

toirs, cold stores, electricity supplies, railways, etc., sanitary systems, and particularly for the erection of sanitary houses for rural labourers, or for the improvement of agricultural buildings which are admittedly unsanitary.

Individual members and affiliated societies may obtain from the agricultural mutual credit banks loans for short terms, medium terms (ten years), or long terms. Unfortunately it is only for this last category that it is possible to indicate separately the amount of the loans granted to individuals and to co-operative societies, as well as the advances made by the State in both cases. This distinction in the statistics arises from the fact that until the Law of 5 August 1920, which, so to speak, codified the legislation on mutual credit and agricultural co-operation, long term loans were regulated by two different laws: loans to societies were instituted by a Law of 29 December 1906; individual loans only go back to a Law of 19 March 1910.

On 31 December 1913, there were 97 regional banks working, with a subscribed capital of 25,070,087 francs, of which 23,202,305 francs were paid up. On 31 December 1918, the subscribed capital was 27,537,179 francs, of which 25,523,187 francs were paid up, and on 31 December 1919, the paid up capital amounted to 27,123,457 francs. The deposits amounted to 4,412,240 francs on 31 December 1913, to 13,849,817 francs on 31 December 1918, and to 18,879,313 francs on 31 December 1919. The reserves rose from 8,000,785 francs at the end of 1913 to 16,791,547 francs at the end of 1918, and to 20,646,874 francs at the end of 1919. We may add that to the regional banks are affiliated about 4,500 local banks, the number of which remained nearly stationary from 1913 to 1919 (1).

We are now in a position to describe the support which public authorities have given since 1914 to the mutual agricultural credit banks, whether the borrowers from them have been agricultural societies, or simply individuals. We shall first speak of the normal activity of these banks, bearing upon transactions effected in virtue of laws previous to the war; we shall afterwards see how under the pressure of circumstances they have been obliged to extend their sphere of action.

§ 1. THE NORMAL ACTIVITY OF MUTUAL AGRICULTURAL CREDIT BANKS.

The normal activity of mutual agricultural credit banks was considerably reduced as a result of the war. Mobilization had deprived the country of all the young and vigorous men, and the work on the land was done for the most part by women and old men, who, as a general rule, hesitated to have recourse to agricultural credit in the absence of the head of the family. On the other hand the high price of requisites, the scarcity of labour, and the difficulties of transport, prevented agriculturists from

(1) We take all these figures from the *RAPPORT DU MINISTRE DE L'AGRICULTURE SUR LE FONCTIONNEMENT DES CAISSES DE CRÉDIT AGRICOLE MUTUEL DE 1914 À 1919*, Paris, 1920.

undertaking large expenditure on their farms. Lastly most of the mutual agricultural credit banks were disorganized by the mobilization of their staffs.

Short Term Loans. — The capital provided by the regional banks for short term loans is shown in Table I (1).

TABLE I. — *Funds Available for Short Term Loans.*

	1913	1918	1919
	fr.	fr.	fr.
From their paid up capital	23,220,305	25,523,187	27,123,457
From their reserve fund (close of preceding year)	6,212,976	16,791,547	20,646,874
Advances from the State	67,541,782	69,385,091	67,646,223
Total . . .	96,975,063	111,699,091	115,416,554

As will be seen, the State advances at the end of 1919 amounted only to 104,441 fr. more than at the end of 1913. The regional banks, except that of Nièvre, which received an advance of 50,000 fr., were able to meet applications for loans with their available funds. In some cases these funds were very considerable, because of the limited number of loans granted and the many repayments which the borrowers were able to make by reason of the increased prices received for agricultural produce.

Medium Term Loans. — Medium term credit is a war time innovation. A certain number of regional banks conceived the happy idea of introducing it to enable agriculturists to carry out operations which would not have been possible with the aid of short term credit only. To regulate this practice and to point out its utility, a circular was addressed to all the regional banks on 7 October 1916, stating the conditions under which medium term loans might be granted, and fixing the amount at 3,000 francs, and the maximum duration at 5 years. A ministerial decision of 15 February 1917 raised to 5,000 francs the maximum amount of medium term loans. As this limit did not correspond to the high prices of stock and agricultural implements, the Law of 5 August 1920 abolished all limitation of the amount of loans, and left to the regional banks the power of deciding the amount of the loan to be granted, in view of the needs of the borrower and the security furnished by him. The limit of time for repayment was increased to ten years.

There are no statistics of the amount of middle term loans.

Individual Long Term Loans (Law of 19 March 1910). — On the contrary, the Ministerial Report on the Working of Agricultural Mutual Credit Banks from 1914 to 1919 shows us the total amount of long term

(1) The Report of the Minister of Agriculture already cited.

loans, whether to individuals or to associations. The number of individual loans outstanding at the end of 1913 was 3,099 and their total amount 11,745,611 francs. The loans granted from the end of 1913 to the end of 1918 were 632 in number and totalled 2,350,491 francs, giving an average of 3,900 francs per loan. Thus, from the passing of the Law up to the end of 1918, 3,731 loans were granted for a total amount of 14,096,102 francs. Up to the end of 1919, the number of loans granted was 3,883 and their total amount 15,857,594 francs

For carrying out these transactions, the regional banks had received from the State, up to 31 December 1919, 19,348,809.65 francs of which 5,569,015.49 francs had been repaid. The sums advanced which remained at their disposal amounted to 13,779,794.16 francs as compared with 14,528,488.14 francs at the end of 1913 and 13,943,981.44 francs at the end of 1918

Collective Long Term Loans (Law of 29 December 1907). — The number of co-operative societies which were granted loans is shown in the following table :

TABLE II. — *Long Term Loans Granted by the State to Agricultural Co-operative Societies.*

Years	Number of co-operative societies	Number of members	Capital paid up	
			fr.	fr.
1913	382	48,431	7,519,588	13,188,134
1914	55			2,052,250
1915	15			522,450
1916			2,157,534	160,000
1917	11			312,000
1918	7			260,467
1919	7			542,900
Total . . .	479	56,879	9,677,122	17,009,101

These 479 co-operative societies, out of 17,009,101 fr. of loans granted, had up to 31 December 1919 only actually received 16,870,809.23 francs of which they had repaid 5,900,698.55 francs ; on 31 December 1919 they had remaining at their disposal 10,970,110.68 francs.

§ 2. THE WAR TRANSACTIONS OF AGRICULTURAL MUTUAL CREDIT BANKS.

While the war considerably reduced the normal work of the agricultural mutual credit banks, it opened to them on the other hand a new sphere of action in the granting of loans for cultivating neglected land,

and of loans to military pensioners and civilian victims of the war for the purchase of small rural properties.

A. *Advances for the Cultivation of Neglected Land.* — When the statistics revealed that for autumn cereals alone the diminution of land sown on 1 January 1916 was 740,000 hectares, as compared with 1914, in the territory which had not been invaded, the Government took action and on 6 October 1916 a Law was passed authorizing advances to communes for a period equal to that which must elapse before the harvest. The difficulties of applying this law prevented it from producing appreciable practical results. To remove these difficulties it was replaced by a new Law, dated 7 April 1917, and it was decided that the advances for which application had been made under the repealed law would be granted in conformity with the Law of 7 April 1917, to be in force "for the duration of the war and of the agricultural season following the cessation of hostilities" (Art. 1).

This law authorizes advances for the cultivation of neglected land to departments and communes, co-operative societies and associations for mechanical cultivation. The advances thus granted are for a period of three years and interest at one per cent. is payable on them. The members of co-operative societies are not obliged to subscribe capital in cash, as their liability towards the society can be represented by their occupation of the land of which they are proprietors or tenants.

In fact the advances for which the Law of 1917 provides were almost exclusively applied for by co-operative societies belonging for the most part to the liberated departments. The agriculturists of these districts, unable by their own unaided efforts to overcome the obstacles of every kind which met them while restoring their farms to cultivation, understood perfectly all the advantages they might derive from the Law of 1917. They not only perceived the possibility of obtaining advances on advantageous terms while waiting for compensation for war damages, but they also took into consideration the facilities that co-operation might offer for the purchase of fertilizers, animals, and indispensable requisites. Under these circumstances the co-operative societies of the liberated regions developed rapidly, and contributed to the rehabilitation of life in the devastated districts. On the other hand, no department claimed the benefit of the law, and to communes only very few advances were granted.

Fifty-six communes have benefited by the law of 16 October 1916. They received 405,661 francs in advances for the purpose of putting under cultivation 1,401 hectares. In 1918 the repayments and credits withdrawn amounted to 202,479 francs, and in 1919 to 36,674.60 francs, that is, a total of 239,153.60 francs. On 31 December 1919 the outstanding loans to communes only amounted to 166,507.40 francs. Seven other communes availed themselves of the Law of 7 April 1917 for putting under cultivation 557 hectares and received advances to a total amount of 191,450 francs. The repayments and credits withdrawn amounting to 67,000 francs the outstanding loans at the end of 1918 were 124,450 francs.

On the other hand 20 co-operative societies with 602 members took

advantage of the Law of 7 April 1917 for the cultivation of 9,153 hectares in 1918. In that year they received advances to a total amount of 2,597,400 francs. The repayments and credits withdrawn amounted to 1,530,484.15 francs, so that the outstanding loans at the end of 1918 amounted to 1,066,915.85 francs. In the course of the following year 19 co-operative societies numbering 627 members, and cultivating 11,473 hectares, obtained loans to the amount of 7,364,000 francs of which, however, at the end of December 1919 only 5,750,000 francs had been actually paid to them.

Up to the end of 1919, co-operative societies and communes had received through the application of the Law of 7 April 1917, a total sum of 8,548,850 francs in advances; the repayments and credits withdrawn amounted to 1,759,484.15 francs so that the outstanding loans were 6,789,365.85 francs (1).

B. *Credit for the Purchase of Small Rural Properties by Military Pensioners and Civilian Victims of the War.* — A Law of 9 April 1919 provided for granting loans to facilitate the purchase and improvement of small rural properties by persons belonging to the following classes:

(a) Ex-soldiers and ex-sailors entitled to pensions paid by the State for wounds received or illnesses contracted during the course of the war:

(b) Widows entitled to pensions or life annuities paid by the State or by the *Caisse de prévoyance des marins français*, because of the deaths of their husbands from wounds received or illness contracted during the war;

(c) Those who are entitled to life indemnities or pensions paid by the State or by the *Caisse de prévoyance des marins français* because of injuries caused to persons by the war.

These loans, granted by the agricultural mutual credit banks, or by building societies (2), were repayable by annual instalments, the interest being at the reduced rate of 1 per cent. Unfortunately the properties purchased by the help of these loans were not to have a value above 10,000 francs. It was doubtless this low figure which prevented purchasers from seeking to benefit by the law. The Minister of Agriculture, replying recently to a question asked in the Chamber of Deputies by M. de Rothschild declared that "the regional agricultural mutual credit banks had, by application of the Law of 9 April 1918, granted to military pensioners and civilian victims of the war in 1918 and 1919, 95 loans amounting to 4,059,986.46 francs. Up to 1 January 1921 loans to the total amount of 4,898,675.69 were granted to 537 persons of whom 453 were ex-service men and 84 were war widows (3)."

These figures are insignificant. The Law of 9 April 1918 was repealed and replaced by a section of the Law of 5 August 1920, which raises to 40,000 francs the amount of individual long term loans, whoever may

(1) All these figures are taken from the Ministerial Report previously cited.

(2) These societies, organized under the Law of 10 April 1908 are for the purpose of granting long term loans at a reduced rate of interest to purchasers of small properties (fields, gardens or private houses). See our issues of June, July and September 1915.

(3) *Journal Officiel*, 20 May 1921

be the borrower. Military pensioners and civilian war victims alone have the right to pay only 1 per cent. interest, accorded to them by the Law of 9 April 1918, and the new law continues in their favour that clause of the repealed law according to which a bonus of 50 centimes per 100 francs is annually paid by the State, for each legitimate child born after contracting the loan, so as to diminish the annuity charges payable by the borrower to the lending society.

These allowances are paid by the State directly to the lending society on account of the borrower who thus has to pay the difference between the total annuity charge and the allowance of the State. To make the matter clear let us take for example a loan of 40,000 francs for 25 years. The annuity charge payable is 1,816.26 fr.

Should a child be born to the borrower after con-

tracting the loan the State will pay for him.	200.00 francs
The borrower will therefore pay only	1,616.28 "
For the second child the State will pay.	400.00 "
The borrower will only pay	1,416.28 "
For the third child the share of the State will be	600.00 "
And that of the borrower	1,216.28 "
For the sixth child the share of the State will be	1,200.00 "
And that of the borrower	616.28 "
For the ninth child the share of the State will be	1,800.00 "
And that of the borrower will be reduced to.	16.28 "

And with the tenth child the annual payment will be entirely at the expense of the State (1).

§ 3. THE NATIONAL OFFICE OF AGRICULTURAL CREDIT.

The crisis through which, owing to the war, co-operative agricultural credit passed, and still more the necessity of re-adjusting it to the new conditions of existence after the cessation of hostilities, led to the accomplishment of a long desired reform. Agricultural co-operative credit, as it exists in France, did not originate in an *a priori* conception of the legislature; it is the outcome of experience, and its legal status was based on a variety of different provisions. At the close of the war there were no fewer than twelve laws on the subject (2) and the time seemed to have come for the unification of this scattered legislation. This was accomplished by the Law of 5 August 1920, referred to more than once in the course of this study.

(1) It would have been necessary here to refer to the Law of 21 June 1919 by which special credit facilities were given to agriculturists of the invaded departments, if this law had not been almost at once repealed by the Law of 5 August 1920 which consolidated the legislation on mutual credit and co-operation.

(2) Laws of 14 November 1894, 31 March 1899, 25 December 1900, 20 July 1901, 29 December 1906, 14 January 1908, 18 February 1910, 19 March 1910, 26 February 1912, 30 November 1912, 9 April 1918, and 21 June 1919

Not only did this Law unify and adapt to new requirements the legal status of mutual agricultural credit, but it was also an effort to reduce to a minimum the necessary delay in obtaining advances. With this object a public office was opened, financially independent and directed by responsible managers: the National Office of Agricultural Credit. In a general way this office ensures the application of the legislation on mutual agricultural credit. Its special objects are:

1. The management of the funds appropriated to agricultural credit (1);
2. The management of deposits received by the regional mutual agricultural credit banks and entrusted to it by them;
3. The issue of bonds through the regional mutual agricultural credit banks;
4. The management of the funds arising from the repayment made on an advance of 100 millions of francs granted by the State to Departmental Agricultural Committees, under the Law of 4 May 1918, relating to the cultivation of neglected land (2).

(1) By the terms of the Law of 17 November 1897, the Bank of France was to advance 40,000,000 francs, without interest, to the State, for purposes of agricultural credit, and to make an annual payment equal to the eighth part of the rate of discount multiplied by the figures of the productive circulation. When the rate of discount is 3.50 per cent, the proportion fixed for the calculation of the annuity is raised to one seventh of the rate of discount, and when it exceeds 4 per cent, the proportion is fixed at one eighth (Agreements of 1911). By an Agreement of 26 October 1917 the advance of 40,000,000 francs was continued and new rules were made for the calculation of the annual payment. According to M. Henry Sagnier (*Journal d'Agriculture pratique*, Paris, 5 November 1921) on 31 December 1920 the sums paid to the State by the Bank of France and appropriated to agricultural credit amounted to 40,000,000 francs for the advance without interest, and about 300,000,000 francs for the annual payments. The advances, made out of this, less repayments, amounted to:

	francs
Short term credit	64,719,920
Advances to communes	54,908
Advances to co-operative societies	21,745,463
Advances to co-operative societies and to communes	10,547,516
Long term credit	18,012,150
Long term credit to disabled soldiers	8,147,638
Special advances to the liberated regions	1,080,000
	—
Total	124,307,595

From April to August 1921 the Committee of Management of the National Office advanced about 50,000,000 francs to the regional agricultural credit banks. In September 39 regional banks again received advances amounting to about 5,600,000 francs. Of these advances more than three-quarters were devoted, on the one hand to long term loans for cultivation on a small scale, especially to disabled soldiers, and on the other, to loans to agricultural co-operative societies.

(2) These repayments amounted about 36,500,000 francs at the end of October 1921. (Henry SAGNIER, in the article cited).

The organization and working of the National Office of Agricultural Credit resemble those of great financial institutions. For the payment and repayment of advances, it adopts the banking methods of current accounts and cheques, which enables it exactly to proportion the State advances to the real and urgent needs of regional banks. It will serve as a bank for adjusting the funds at the disposal of the regional banks to their needs, being in a position to take account of the requirements of every agricultural credit bank according to the time of year and the nature of the cultivation in the district.

The advances for short and medium term loans will be made by means of current accounts to be opened with the Treasury Office, with the *Caisse des Dépôts et Consignations*, and with the Bank of France. This will enable the regional banks to obtain in a few days the advances needed and will reduce to a minimum the paper currency, the advances being only granted in proportion to the requirements.

For long term advances the regional banks may receive in cash the sums to be paid to their members; but these sums will only be given to them according to the number and amount of the loans applied for.

§ 4. SUBSIDIES TO ASSOCIATIONS FOR THE ENCOURAGEMENT OF MOTOR-CULTIVATION.

The question of the encouragement of motor-cultivation was brought before Parliament as early as 1913, but it was not until 1915 that a Decree of the Ministry of Agriculture, dated 7 September, decided that a subsidy of 33 per cent. should be given to agricultural associations for the purchase of tractors "for purposes of experiment and demonstration." For the liberated regions the subsidy might be raised to 50 per cent.

Subsidies were also granted for the purchase of 29 tractors in 1916 and of 195 in 1917. They amounted to 66,650 francs in 1916 and to 1,011,224 francs in 1917.

At this time the Laws of 2 January and 7 April 1917 on the cultivation of land were passed. These laws authorized the granting of subsidies of 50 per cent. to agricultural associations, departments, and communes for the purchase of tractors. For this object special credits were inserted in 1917, 1918, and 1919 in the budget of exceptional expenses of the civil departments of the Ministry of Agriculture; they were managed by the Motor-Cultivation Department established at the Ministry of Agriculture, under a Decree of 6 May 1917, and attached to the Ministry of the Liberated Regions by a Decree of 18 September 1919.

The conditions attached to these subsidies were laid down by several decrees. In the departments which had not been invaded they were allotted to agricultural associations, departments and communes. But in the liberated regions they might be given through the medium of the Office of Agricultural Reconstruction to individual agriculturists who had suffered loss through the war (Order of 16 July 1919). In conformity with these provisions, from 1 January 1918 to 31 December 1919, subsidies

amounting to 13,306,219 francs were granted for the purchase of 1,793 machines. There were also sent in for consideration up to 31 December 1919, applications for subsidies which would amount to about 34,340,000 francs, 12 millions of which would be for the departments which had not been invaded, and 22,340,000 francs for the liberated regions.

The granting of subsidies authorized by the two laws of 1917 regarding the cultivation of land was an exceptional war-time measure. But after 1 January 1920 the Minister of Agriculture had no longer at his disposal the exceptional credit of the Motor-cultivation Department as it was transferred to the Ministry of the Liberated Regions, which henceforth was exclusively charged with the duty of ensuring the cultivation of the land in the departments devastated by the war. It was therefore necessary to consider new provisions for 1920.

By an Order of 26 December 1919 the new conditions for the granting of subsidies for motor-cultivation were fixed, the administration undertaking to apply to Parliament for the necessary credit. By the terms of this Order the subsidies were reduced to 10 per cent. for machines imported from abroad, and to 25 per cent. for those of French manufacture, to be raised by 5 or 10 per cent. according to the place of manufacture, for co-operative societies. In the Budget of the Ministry of Agriculture for 1920, the Chambers voted a credit of 14,110,000 francs for the encouragement of motor-cultivation for the benefit of the departments which had not been invaded as well as for the liberated districts. But a special Order was issued on 18 December 1920, raising the subsidies somewhat in 1920 for agriculturists who had suffered losses through the war. For them the maximum rate might be 25 per cent. for imported machines, and 40 per cent. for machines of French manufacture.

The Report of the Ministry of Agriculture upon the Measures taken for the Encouragement of Mechanical Cultivation, dated 8 January 1921 (1), from which we take the subjoined information, contains a statistical statement according to departments, of the number and amount of the subsidies granted to various motor-cultivation societies indicated by name.

It may be thus summarized :

TABLE III. — *Subsidies to Motor-cultivation Societies.*

Years	Number of motor-cultivation societies and other institutions to which subsidies were granted	Purchase price of machines		Amount of the subsidies
		fr.	fl.	
1916 . . .	19	217,462		66,650
1917 . . .	159	2,818,322		1,011,224
1918 . . .	155	6,464,530		2,999,300

(1) *Journal Officiel*, 2 February 1921.

There are no figures for 1919 in the Report, but they are to be found in the Preliminary Report of the Order for the Appointment of the Central Commission for Mechanical Cultivation, which was established in March 1920. These figures are unfortunately on a different basis from those which we have given; but we think nevertheless they are of sufficient interest to be given here

TABLE IV. *Number of Tractors
for the Purchase of which a Subsidy was Granted.*

Years	Number of machines for the purchase of which a subsidy of 35 per cent was granted	Number of machines for the purchase of which a subsidy of 50 per cent was granted	Total
1916	46	—	46
1917	154	7	161
1918	124	247	365
1919	53	2,518	2,571

§ 5 SUBSIDIES TO MUTUAL INSURANCE SOCIETIES.

Subsidies to societies for mutual insurance against agricultural risks date from 1897. At that time M. Méline, then Minister of Agriculture, on his own initiative altered the clause in the agricultural budget which related to assistance in case of losses, and devoted part of the funds to subsidies for the encouragement of mutual insurance societies. To legalize this reform, the Minister introduced the alteration into the budget for the year 1898, at the same time asking the Chamber for credit for this purpose. Parliament ratified the innovation, giving its consent to the insertion of a sum of 500,000 francs in the budget, withdrawn from the funds hitherto devoted to the assistance of individual cases, and appropriated for subsidies to small mutual insurance societies.

On 31 December 1897, the number of societies receiving subsidies was 1,484; 110 new societies were formed in 1898, 341 in 1899, 342 in 1900, 396 in 1901, 460 in 1902, 737 in 1903, 1,105 in 1904, 1,116 in 1905, 1,138 in 1906, 1,048 in 1907, 977 in 1908, 784 in 1909, 676 in 1910, 963 in 1911, 884 in 1912, and 902 in 1913.

Owing to the rapid increase in the number of the societies, the sum appropriated to subsidies soon became insufficient. The original credit of 500,000 francs was raised to 600,000 francs in 1903, and to 1,200,000 francs in 1905. It was 1,540,000 francs in 1914.

The subsidies are of two kinds, the one to encourage the formation of new societies, the other to help those which have suffered serious loss in the course of their business.

The first, called initial or foundation subsidies, are granted to societies in the course of formation. They enable them not only to cover the cost of organization, which is usually trifling, but also to form a small reserve fund. They are fixed according to a scale, taking into account the value of the capital assured, the number of members, and the extent of the area of operations. They vary from 500 to 1,000 francs.

The second kind of subsidy is granted to societies in full working order, which have existed for at least twelve months and have suffered exceptional losses in the course of the year. Their object is to help the societies when they have not the required resources either to compensate their members sufficiently or to replace the reserve funds to which they have been obliged to have recourse to pay compensation. These subsidies are calculated in proportion to the losses, taking into account the importance of the society, the number of its members, and especially of the extent to which each member contributes, that is of the rate of premiums and levies. They are also calculated according to a scale, and must not be less than 100 francs.

We may add that the subsidies are reserved solely for re-insured societies, to the exclusion of those which prefer to remain in isolation. The local mutual societies, which exist or have been formed in a department or district where there is not yet a re-insurance society, may re-insure themselves in one of the societies in Paris, which directly re-insure the local societies not within the area of operations of a re-insurance society, until such a society can be formed.

The agricultural mutual insurance societies suffered heavily during the war, not only in the invaded districts, where many of them completely disappeared, but throughout the whole country. Many of the managers and secretary-treasurers of these associations were mobilized. It was as a rule, impossible for the older agriculturists and the women and children, anxious before everything else to carry on from day to day the most urgent part of the farm work, to take the place of those who were absent, and ensure the working of agricultural mutual insurance institutions. The scourges usually so dreaded by agriculturists, fire, hail, cattle disease, etc., were a menace much less serious than that held over them by the war. Consequently the necessity of insuring crops and cattle against the different agricultural risks caused less anxiety to most of the agriculturists, and this state of things was not favourable to the growth of insurance institutions. While in 1914 578 mutual societies were formed, the numbers fell to 68 in 1915, 48 in 1916, 38 in 1917, and 68 in 1918. In 1919 the number rose to 127 and in 1920 to 162.

Owing to this stagnation the credit appropriated to subsidies was considerably reduced during the war; for 1918 it was only 500,000 francs.

But directly after the cessation of hostilities the legislature again announced its intention of encouraging mutual agricultural insurance institutions as largely as before by inserting in the budget of 1919 a credit of 900,000 francs, raised to 1,400,000 francs in the budget of 1920. A corresponding revival of the mutual societies took place, for no fewer

than 14,400 mutual agricultural insurance societies were in receipt of subsidies on 31 December 1919 and 14,562 on 31 December 1920.

According to the Reports of the Ministry of Agriculture on their working (1), these 14,562 societies were thus divided :

Live stock insurance societies	10,138
Live stock re-insurance societies	77
Fire insurance societies	4,213
Fire re-insurance societies	36
Hail insurance societies	28
Accident insurance societies	68
Accident re-insurance societies	2

The total amount of the subsidies granted in 1920 was 1,275,200 fr. divided as follows :

Live stock insurance societies	934,000 fr.
Fire insurance societies	288,990 »
Hail insurance societies	17,000 »
Accident insurance societies	35,300 »

ITALY.

THE TEACHING OF CO-OPERATION AND OF MUTUAL INSURANCE.

SOURCES :

- CASALINI (Dr. Mario) : L'insegnamento della cooperazione. Almanacco de *L'Italia Agricola*. Piacenza, 1907.
- CASALINI (Dr. Mario) e RAINERI (Dr. Iftiore) : L'insegnamento della cooperazione e della mutualità agraria. Relazione. Rome, 1920.
- MANFREDI (Avv. Felice) : Per l'educazione cooperativa. *La Rivista della Cooperazione*, No. 9-10. Rome, September-October, 1921.
- DO. : Il corso superiore di cooperazione presso l'Istituto Nazionale della Mutualità Agraria. *La Cooperazione Italiana*, No. 1,473. Milan, 7 October 1921.
- OB (A.) : I corsi di applicazione per la cooperazione in Milano. *Bollettino dell'Opera Nazionale per i Combattenti*, No. 2. Rome, April-June, 1921.
- VALAR (Giovanni) : I corsi accelerati di cooperazione e di previdenza, *La Rivista della Cooperazione*, No. 7-8, Rome, July-August 1921.

(1) RAPPORT DU MINISTRE DE L'AGRICULTURE SUR LE FONCTIONNEMENT DES SOCIÉTÉS D'ASSURANCES ET DE RÉASSURANCES MUTUELLES AGRICOLES DE 1914 À 1919 (Paris, 1920) and the corresponding report for 1920 (Paris, 1921).

IL CORSO SUPERIORE PER L'INSEGNAMENTO DELLA COOPERAZIONE ALL'UNIVERSITÀ COMMERCIALE "LUIGI BOCCONI" DI MILANO. *La Rivista della Cooperazione*, No 9-10. Rome, September-October, 1921.

CORSO SUPERIORE DI COOPERAZIONE PRESSO LA SOCIETÀ UMANITARIA. *La Rivista della Cooperazione*, No 9-10. Rome, September-October, 1921.

For some time past the teaching of co-operation and of agricultural mutual insurance has been more and more organized and diffused in Italy, by certain bodies which have recognized the desirability of forming, by means of courses of technical and practical instruction, individuals capable of carrying on propaganda and of directing the co-operative movement, which is daily acquiring greater importance in the country.

The work done in this direction during the last few years calls for notice on account of the excellent results obtained.

§ I. THE STEPS TAKEN BY THE NATIONAL CREDIT INSTITUTE FOR CO-OPERATION AND BY THE HUMANITARIAN SOCIETY.

During the last two years the National Credit Institution for Co-operation has started in every part of Italy short elementary courses, extending over two months, for the preparation of co-operators; it may be said that nearly all the chief towns of provinces have now had by turns their course, to which the most suitable persons of the district were sent to learn the rudiments of technical co-operation; they were assisted by scholarships, as many of them were working men who otherwise could not have left their work to devote themselves to study. The fundamental ideas of book-keeping and of legislation on co-operative societies formed the subject of these courses.

In 1920 five were held; at Venice, Verona, Bari, Naples, and Caserta. The pupils were in all 124, coming for the most part from co-operative labour societies and distributive societies; there were 265 days of study, with 8 hours a day at the school. The programme, eminently practical, was drawn up by experienced local teachers. The cost was more than 1,000 liras per pupils (1). More recently two other courses were started; one at Prato, for the provinces of Florence, Siena, Arezzo, Pisa, and Lucca, lasting 50 days, attended by 27 pupils, the other for Latium with 18 pupils.

The work of the Humanitarian Society of Milan deserves special notice (2). Last year it resumed its higher courses for co-operators, which were also held this year; they lasted six months and produced most

(1) See the Report for the year 1920 of the National Credit Institution for Co-operation.

(2) The Humanitarian Society originated in Milan in 1893 through a legacy amounting to 10,000,000 lire left by Prospero Moisè Loria for the purpose of "putting the unfortunate, without distinction, in a condition to rise of themselves, and procuring for them support, work, and instruction." It aims, among other things, at promoting and helping schools of art and technical schools, household and rural industries, co-operative societies for production and labour, and similar institutions adapted for the prevention of unemployment.

satisfactory results. For selected individuals coming from elementary courses, or from co-operative organizations, they provided a wide range of instruction under the guidance of eminent co-operators and university professors; political economy, statistics, the elements of law, notions of history and co-operative legislation, hygiene, industrial and agricultural technology and the history of the labour movement, were the chief subjects of these higher courses. The lessons were alternated with exercises, oral discussions, written essays, and visits for instruction to co-operative industrial undertakings. After the course the pupils spent a short practical novitiate at some of the most important co-operative institutions.

At the close of the last six months' course the experiment was tried of holding written and oral examinations. About forty pupils took part, some of whom held scholarships granted by the Humanitarian Society, others scholarships offered by the *Opera Nazionale per i Combattenti* (1).

The pupils are of different classes; side by side with working men may be seen persons who have attended intermediate schools, and even universities. The courses were most successful, not only in respect of the results of the examination, but also because of the eager interest displayed by the pupils.

Thus the Humanitarian Society helps to train leaders for the co-operative movement. Next year the course will be changed with a view to co-ordinating better the various lessons, to which will be added thrift, a subject of general and fundamental interest.

§ 2. THE HIGHER COURSE FOR THE TEACHING OF CO-OPERATION AT THE COMMERCIAL UNIVERSITY OF MILAN.

Some teaching institutions have thought it desirable to introduce the subject of co-operation into their programmes. Of these the most important is the "Luigi Bocconi" Commercial University of Milan, which at the beginning of the scholastic year 1920-21 formed within its own school of economics a Section of Co-operation. This Section, besides teaching the economic and social principles of co-operation, takes up the study of various questions connected with the co-operative movement, the collection of statistics, etc., so that it is now the principal institution for the scientific study of co-operation in Italy.

To this Section only pupils of the 3rd and 4th course of the University

(1) The *Opera Nazionale per i Combattenti*, constituted by the Lieutenantcy Decree No. 1,970 of 10 December 1917, aims at "providing moral, economic, financial and technical assistance for soldiers." Among the duties of its "Social Section" is that of promoting the establishment of elementary industrial, commercial, and agricultural schools, which seek to assist the intellectual and vocational training of working men or persons of the middle class. See on this subject the article in our issue of June-July 1919.

are admitted. During the school year just closed, 19 pupils were registered. Of one set of lessons the subjects were: The economic and social importance of co-operation. — Explanation and criticism of the legislation connected with it. — Sketch of the organization of the co-operative movement in Italy. — Organization of credit for co-operation.

In a second set of lessons the following subjects were taken up: — The conception of co-operation as a social fact: co-operation in general tends to confine itself to a class. Different forms of co-operation in different countries. Consequence of such differences (of function and form) as regards statistics of co-operation: diversity and difficulty of international comparisons. — Distributive co-operation lends itself better to international comparisons and the reason for this. General ideas of distributive co-operation. Statistical comparisons between co-operative distributive societies in the countries of Europe. Sources of information. — Co-operation in France. Statistics of co-operation in France. This opportunity is taken for explaining more clearly the reasons of the diversity of the statistics, and of the consequent difficulty of making comparisons. — Italian statistics respecting co-operation: official sources and private sources or statistics published by the National League of Co-operative Societies. Other sources of statistics. Sources of information on Italian co-operative societies descriptive rather than statistical. Comparative examination of the official statistics of 1906 and 1910.

As the subject for the thesis which they must write to obtain their diploma many of the pupils took questions respecting co-operation, among which we may mention the following: The capital contributed by members and that obtained on credit in co-operative distributive societies. How best to encourage the investment of small savings in the shares of co-operative societies instead of in savings deposits in banking institutions. The distribution of profits between capital and labour in co-operative productive societies. The organization of credit for co-operation.

The first year of the working of the Section opened with warm support from the pupils, and with excellent results. The prospectus for the next scholastic year is now being drawn up; the lessons will be completed by visits to the principal centres of the co-operative movement, and the publication of a series of monographs on the principal problems connected with co-operation will be commenced.

§ 3. THE WORK OF THE " ISTITUTO NAZIONALE DELLA MUTUALITÀ AGRARIA "

IN THE TRAINING OF CO-OPERATORS.

The *Istituto Nazionale per la Mutualità Agraria* (Rome) has taken up the teaching of co-operation with more ample means and with special reference to agricultural co-operation. On 20 June 1919 it formed a section solely with this object. It proposes:

(a) by means of special teaching in public schools and of special temporary courses to diffuse a knowledge of mutual insurance, co-operation,

rural hygiene, and the laws of social thrift, and more particularly, to produce trained persons capable of directing and administering mutual agricultural insurance societies, and of promoting the formation of such societies;

(b) to train persons for assisting in agricultural associations in the application of rules for the prevention of disease in men and animals, and accidents in agricultural labour;

(c) propaganda for the encouragement of social thrift.

The funds are subscribed by different bodies, either in the form of scholarships for those attending the courses, or as contributions towards the expenses of teaching.

In 1919, 1920 and 1921, the section arranged two different kinds of course, one lasting ten days, the other thirty days. Preference was given to the shorter courses of ten days.

The Institution has found by experience that the greatest efficiency may be attained by adopting the following fundamental principles:

1. Short duration of the course: this ensures the attendance of a larger number of persons, as it does not keep them too long absent from their normal occupations;

2. Specialization of teaching; instead of general lessons illustrating the various forms of co-operation and of agricultural mutual insurance societies, it is to be preferred that each course should illustrate one type of co-operative or mutual society, supplying all needful information on the subject. Thus at the end of the lessons, the pupils are in a position to form and to manage that kind of society which they have been studying

3. Lessons alternating with free discussions, in which the teacher should answer any question addressed to him by his pupils.

To give an idea of the importance of the short courses we reproduce here the programme of one specially devoted to explaining the mutual insurance of cattle: Co-operation and agricultural mutual insurance (a general view of the co-operative and mutual insurance movement in the country). Mutual live stock insurance societies (the legal constitution of mutual insurance societies — regulations for obtaining legal recognition of such societies and of their federations — organization and working). Provincial federations for live stock insurance (organization and working). Mutual live stock insurance societies (detailed study of the rules with discussion). The system of management of a mutual live stock insurance society (examination of the registers necessary). Practical exercises in the systems of management of a mutual live stock insurance society (opening of books and management of a mutual society according to models). Mutual live stock insurance societies and their financial methods. Re-insurance.

In 1920 in different provinces 16 courses of 10 days' duration were held on various forms of co-operation and mutual insurance. They were attended by 831 pupils, who may be thus classified according to their occupations:

agriculturists	203
teachers	171
veterinary surgeons	117
secretaries of co-operative societies	98
land surveyors	47
organizers	38
students	35
insurance agents	28
employés	23
communal secretaries	17
priests	17
lawyers	13
accountants	11
tradesmen	8
school inspectors	4
licentiates of industrial schools	1

It should be observed that by a decision of the Management Committee a number of scholarships was placed at the disposal of students nominated by organizations of agricultural labourers.

Besides the shorter courses there were monthly courses with a wider range of instruction.

A monthly course ending 30 September last was held in Rome (1) to bring the following subjects before pupils coming from different districts:

Legislation on co-operative societies in general and agricultural mutual insurance societies in particular, compared. — Co-operation in the principal countries of Europe and America. — Co-operation in general and agricultural mutual insurance in Italy (co-operation for distribution, production, and labour, for rural credit, Catholic and non-confessional, for purchase and sale). — Agricultural mutual insurance societies in Italy and their federations. — Federations of co-operative societies abroad and in Italy. This course, intended for persons already holding diplomas and for heads of organizations, or prominent representatives of the various branches of the movement, gave the students a complete picture of the principles and practice of co-operation.

While experience has shown that short courses, devoted exclusively to the illustration of one type of co-operative society or mutual insurance society are most useful, the same cannot be said of courses lasting one month which are too short for the complete training of managers of co-operative societies.

1) The course was inaugurated by Luigi Luzzatti with a masterly speech published in the *Nuova Antologia*, Rome, 1 October 1921, No. 1189.

For this reason the *Istituto Nazionale della Mutualità Agraria* took the initiative — already put into execution — in founding a Free Co-operative University (*Università Libera della Cooperazione*) the object of which is the "training of persons capable of managing and administering co-operative societies, and of diffusing the principles of co-operation and agricultural mutual insurance."

The University, of which Luigi Luzzatti is President, will hold six months' courses every year. Art. 24 of its bye-laws is worthy of notice, because it gives an exact idea of the spirit animating the new institution. It says: "Since the school should correspond with realities, representatives of the various political tendencies affecting co-operation will be called upon to explain objectively the technical reasons for their attitude, and to describe the actual condition of the respective organizations." During the school year lectures will also be given on the laws relating to social insurance.

The University, which will be legally recognized, was formed with the collaboration of the Commune of Rome, the *Opera Nazionale per i Combattenti*, and the Ministries of Labour, of Agriculture, of the Interior, and of Public Instruction. Provincial administrations, communes, savings-banks and co-operative societies have promised to contribute.

Thus we see that Italy is organizing the teaching of co-operation with practical purposes, with the conviction that while the co-operative societies ought to be managed by trustworthy men, it is necessary also that these men should know perfectly whatever it is essential to know in order fully to develop the institutions entrusted to them.

§ 4. THE PROPOSED APPOINTMENT OF ITINERANT INSTRUCTORS IN CO-OPERATION.

This short account of the steps taken in Italy with regard to co-operative teaching would be incomplete if we did not point out how in the Bill for the reform of the legislation on co-operative societies (No. 999) introduced into the Chamber of Deputies at its sitting of 22 November 1922 by the Minister of Labour and Social Thrift (Labriola) there was a plan for the institution of four groups of itinerant instructors in co-operation, with head-quarters respectively at Rome, Palermo, Bologna and Turin, to teach the following subjects: (a) the principles of economic science applied to co-operation; (b) the technology of co-operation in its various forms; (c) the elements of book-keeping and banking as applied to co-operation.

These courses were to last two months. Each group of itinerant instructors was to consist of one professor and two assistants selected by competition from among those who could in any way show that they had the requisite qualifications for teaching the theory and practice of co-operation and of book-keeping as applied to it. The Government, in proposing these "institutions for instruction in co-operation," was animated

by the desire to obviate dangers arising from "improvisation, want of training and experience in the great mass of co-operators, causes of failure and waste of strength which cannot but have a deleterious effect on the general economy of the country"

Nor should it be forgotten that in June 1908 the Superior Council of Labour and the Council of Thrift approved a Bill for the appointment of special itinerant instructors who, under the control of the Ministry of Agriculture, should in various ways carry on an active propaganda for thrift in general (1). This proposal, for various reasons, could not be carried out, but in the agricultural budget a sufficient sum was set apart "to promote and assist efforts made for the encouragement of thrift by means of itinerant instruction, lectures and other methods of propaganda."

This sum, divided by the Government among the National League of Co-operative Societies, the Italian Federation of Mutual Aid Societies, the Humanitarian Society of Milan and the National Committee of Agricultural Mutual Insurance, facilitated the formation by these bodies of the first groups of itinerant instructors, three of which were formed in Milan, with the following programme corresponding with that already approved in 1908 by the Superior Councils of Labour and of Thrift :

(a) to carry on an active propaganda for the promotion of provident institutions in their various forms (mutual insurance, co-operation, saving, insurance);

(b) to explain the rules for the formation and successful working of such institutions ;

(c) to facilitate them in starting work and in their practical working, providing also for necessary supervision ;

(d) to calculate in advance the charges falling upon the societies and the corresponding receipts ;

(e) to popularize the hygiene of labour, and social legislation in general.

The means of giving effect to this programme were: oral propaganda, publications judiciously distributed, special lessons to candidates for the post of masters in elementary schools, and of communal secretaries, prize competitions, and other forms of encouragement for the best institutions.

The appointment of these instructors is an important precedent for the institutions above described, and deserves mention for the zealous and useful activity shown by the instructors in propaganda and in the teaching of mutual insurance and co-operation.

(1) See on this subject our issue of January 1912, page 150.

MISCELLANEOUS INFORMATION RELATING TO CO-OPERATION AND ASSOCIATION.

CZECHOSLOVAKIA.

DISTRICT AGRICULTURAL CREDIT SOCIETIES IN BOHEMIA IN 1919. — RAPPORTS
DE L'OFFICE DE STATISTIQUE DE LA RÉPUBLIQUE TCHÉCOSLOVAQUE. Prague, 1921, No. 10.

Besides the Raffeisen Societies, there are found in Bohemia, under the title of District Agricultural Credit Societies, independent agricultural credit associations the primary object of which is to supply farmers with the credit required for working their holdings (1). On 31 December 1919, there were 166 of these, with 252,244 members. The share capital amounted to 18,688,000 crowns, and in addition the associations had reserve funds amounting to 14,834,000 crowns, savings deposits amounting to 807,782,000 crowns and deposits on current account amounting to 21,427,000 crowns. The loans granted during 1919 totalled 213,308,000 crowns, made up as follows :

Loans on personal security (acceptance of bills, etc.)	97,366,000 crowns
Mortgage loans	24,043,000 "
Loans on the security of articles pledged or of mortgages given by third parties	34,219,000 "
Loans to communal authorities	13,747,000 "
Loans to co-operative agricultural societies	43,933,000 "

Repayments effected during the same year amounted to 32,747,000 crowns.

On 31 December 1919, the loans outstanding were thus divided :

Loans on personal security	63,164,000 crowns
Mortgage loans	86,035,000 "
Loans on the security of articles pledged or of mortgages given by third parties	18,755,000 "
Loans to communal authorities	29,966,000 "
Loans to co-operative agricultural societies	13,342,000 "

211,262,000 crowns

The interest paid on the share capital did not exceed 2.03 per cent. In 1918 it was 1.35 per cent., in 1917 3.26 per cent., in 1916 3.29 per cent., in 1915 and 1914 3.55 per cent., and in 1913 3.99 per cent.

The confidence placed in the District Agricultural Credit Societies

(1) For more detailed information regarding these institutions see the *International Review of Agricultural Economics* of August-September 1921, page 400 and of October 1921, page 480.

is proved by the continuous increase in the amount of the deposits made. These have risen from 232,405,000 crowns in 1913 to 245,392,000 crowns in 1914, 287,875,000 crowns in 1915, 356,314,000 crowns in 1916, 480,839,000 crowns in 1917, 720,592,000 crowns in 1918, 829,209,000 crowns in 1919, although the rate of interest paid on deposits remains very low. This rate varies from 0.25 per cent. to 4.25 per cent., and of the 807,782,000 crowns entered in the deposit-books rates of interest between 0.25 per cent and 2 per cent. were paid on 620,764,000 crowns, between 2 and 3 per cent. on 167,109,000 crowns and between 3 and 4 per cent on 19,909,000 crowns.

FINLAND

THE CO-OPERATIVE MOVEMENT IN 1919 (1) — ANDLSSÄRSAMHETEN I FINLAND 1919, I OG II PELLERVOX XIX ÅRSBOG (*Co-operation in Finland in 1919, I and II 19th Year Book of the Society "Pellervo"*) Helsingfors, Sällskapet Pellervo, 1921

Between 1918 and 1919 the number of co-operative societies in Finland increased from 2,991 to 3,138. All kinds of society showed an increase, the distributive societies increased from 689 to 740, the dairy societies from 494 to 496, the credit societies from 708 to 714, the societies for the joint use of agricultural machines from 295 to 303, the societies for the working of peat bogs from 172 to 181 and other co-operative societies from 633 to 704.

As is well known, a large number of the co-operative societies are affiliated to the society "Pellervo." To this federation belonged in 1919, 497 co-operative societies and miscellaneous societies, as compared with 464 in 1918. These 497 co-operative societies and miscellaneous societies were thus classified: co-operative distributive societies 102 (76 in 1918), dairy societies 120 (116 in 1918); credit societies 182 (176 in 1918); miscellaneous societies 89 (92 in 1918).

It will be seen from these figures that the part played by the "Pellervo" Society in the country steadily increases. Out of 100 co-operative societies in Finland, 13 are affiliated to the "Pellervo" Society, whereas the proportion was only 12.5 per cent. in 1918 and 11.6 per cent. in 1917; of the co-operative distributive societies 13.7 per cent were affiliated to the "Pellervo" Society, as compared with 11.1 per cent. in 1918 and 9 per cent in 1917; of the credit societies, 25.5 per cent, as compared with 24.9 in 1918 and 24.2 in 1917.

We may add that the courses of instruction in co-operation which it gives through the medium of the *Andelsinstitut* (Institute for Co-operation) were attended by a larger number of pupils than in 1918. In the course on distributive co-operation there were 35 pupils, as compared with 44

(1) For previous years see our issues of September 1911, September and October 1915, May and July 1920.

in 1918; in the course on co-operative dairy societies, there were 18 pupils whereas in 1918 there were none. Moreover four local courses were given, while no such courses were given in 1918.

We now give some figures relating to the work of the co-operative dairy societies, the co-operative credit societies, and the central co-operative societies for purchase and sale.

A. Co-operative Dairy Societies. — As we have seen the total number of these societies increased from 494 in 1918 to 496 in 1919; the number of societies which furnished returns of their membership rose from 328 to 344; the number of members, on the other hand, diminished from 41,584 in 1918 to 41,540 in 1919. The value of the shares, the supplementary contributions, and the liability of members remained, generally speaking, unchanged.

Nor is there much difference in the number of cows possessed by the members. While in 1918 the members of 328 dairies possessed in all 264,698 cows, an average of 6.4 per member, the 344 co-operative societies which furnished returns possessed 267,940 cows in 1919, an average of 6.5 per member. In 1918 for 317 dairies there were 15,159 members who had fewer than 4 cows, 20,516 had from 4 to 15 cows, 2,971 had more than 15; in 1919 the respective figures were 338, 15,067; 21,945, and 3084.

The co-operative dairies in Finland generally receive whole milk from their members, but in districts where the population is very sparse, those peasants who have to go long distances before reaching the dairy — in some cases as far as 45 kilometres — possess separators, and carry only the cream (in some cases the cheese also) to the head-quarters of the society. Among the 387 (1918: 371) societies which furnished returns on this subject 260 (1918: 248) received milk from their members, 87 (1918: 88) both milk and cream, 40 (1918: 35) cream only. The total quantity of milk sent to 301 (1918: 307) dairies was 77,298,330 kilogrammes (1918: 160,965,383), with a daily average per society of 2,501 (1918: 2,229) and an average per cow during the year of 751 (1918: 703). The dairies which received produce exclusively from their members were 107 in number (1918: 111), those which receive produce also from non-members, 194 (1918: 195). As to dairy machinery, 363 societies (1918: 363) possessed separators, and 36 (1918: 33) had refrigerators. In 272 societies (1918: 276) out of 407 (1918: 406) steam was the motive force used: in 6 (1918: 5) electricity, in 8 (1918: 7) steam and electricity, in 10 (1918: 9) water power, in 3 (1918: 2) steam and water power, in 53 (1918: 48) animal traction, in 55 (1918: 52) manual labour. In 266 dairies out of 366 (1918: 258 out of 345) the milk is pasteurized. Of 177,298,330 (1918: 160,965,383) kilogrammes of milk received by 301 (1918: 307) dairies, 147,741,899 (1918: 130,643,654) were utilized in butter making, 6,555,525 (1918: 5,579,279) for cheese-making, 330,043 (1918: 369,684) for payments in kind, and 22,670,863 (1918: 24,381,766) were sold. The quantity of butter made was 6,182,260 (1918: 6,750,005) kilogrammes, and that of cheese, 560,700 (1918: 395,366) kilogrammes.

B. *Co-operative Credit Societies.* — The number of co-operative credit societies increased by about 50 per cent. between 1913 and 1918, but in 1919 the percentage of increase diminished somewhat considerably. In 1918 there were 708 credit societies; in 1919 there were 714.

The purposes for which loans were granted by these societies is shown in the following table.

*Number, Amount, Periods and Purposes of Loans
Granted by the Local Credit Societies.*

Years	Number of loans	Total amount of loans in thousands of marks	Number of loans granted for			Purpose				
			one year or less	more than one year and less than three	more than three years	Improve- ment of holdings	Pur- chase of agricul- tural requis- ites	Pur- chase of cattle	Build- ings	Other objects
1913	19,692	3,209	3,403	11,058	4,031	8,151	3,910	3,240	4,093	2,241
1914	22,877	3,635	4,147	13,797	5,133	10,973	4,581	2,595	5,133	2,596
1915	27,464	4,132	6,189	15,381	5,894	12,833	6,091	3,663	4,621	3,680
1916	20,375	4,743	4,415	10,236	5,724	9,191	3,624	3,501	2,914	3,067
1917	11,809	4,583	2,609	5,671	3,466	4,796	1,834	1,847	2,17	2,154
1918	10,122	5,509	2,136	4,757	3,227	4,201	1,504	1,397	1,077	2,003
1919	14,874	11,913	3,500	7,098	4,276	4,184	2,714	1,854	2,167	2,650

In 1919, 591 local credit societies received advances from the Central Credit Institute, as compared with 606 in 1918. These banks contained 28,873 members. The total share capital was 1,188,063 marks and the aggregate reserve funds 742,739 marks. They had, moreover, deposits amounting to 6,947,383 marks. The credits applied for to the Central Institute amounted, in the course of the year, to 28,442,842 marks, but the credits opened only amounted to 17,086,570 marks, an average of 28,911 marks per society, and the sums actually advanced to 11,761,068 marks per society or 19,900 marks per society. The sums advanced were thus 68.8 per cent of the credits opened.

C *Central Co-operative Societies for Purchase and Sale.* — There are in Finland three large central co-operative societies for purchase and sale: the "Valio" Central Co-operative Society for the Export of Butter, the the "Hankkija" Central Co-operative Society for the Purchase of Requisites, and the "Labor" Central Co-operative Society for the Purchase of Requisites.

The first of these societies has not exported butter since 1916, but it continues to do an important business in the country itself. In 1919 there were 292 dairy societies affiliated to it, as compared with 284 in 1918, and it handled 34,364 quintals of butter (28,942 in 1918). It also sells other produce; in 1919 it sold 235,383 kilogrammes of cheese, 395,016

eggs, 7,932,000 litres of milk, 97,800 litres of cream, and 1,100,000 litres of whey.

The sales amounted to 105,000,086 marks as compared with 64,550,220 marks in 1918, and the net profits to 1,292,752 marks (1,030,579 in 1918).

As to the two central co-operative societies for the purchase of requisites, the "Hankkija" Society had 1,286 affiliated societies, as compared with 1,240 in 1918; of these 910 were co-operative distributive societies, as compared with 862 in 1918. It sold goods to the value of 156,456,401 marks, as compared with 78,318,021 marks in 1918.

The progress of the "Labor" Society was not less satisfactory. It contained, on 31 December 1919, 1,149 members, as compared with 1,015 in 1918. The members included 165 local societies (as in 1918) and 984 farmers, as compared with 871 in 1918. The sales amounted in 1919 to 66,576,786 marks, as compared with 25,847,570 marks in 1918, an increase of about 160 per cent. as compared with 56 per cent. in 1918. Amongst the goods sold, we may note 8,625,094 kilogrammes of feeding stuffs to the value of 14,071,948 marks, 5,918,511 kilogrammes of seeds and grain to the value of 15,188,864 marks; 4,702,547 kilogrammes of fertilizers to the value of 4,700,860 marks; machines to the value of 6,912,822 marks; manufactured products and groceries to the value of 16,361,679 marks; miscellaneous goods to the value of 9,340,605 marks. The net profits for the year 1919 were 598,075 marks, as compared with 605,186 marks in 1918.

GERMANY

THE GERMAN CO-OPERATIVE CONGRESS — *Deutsche Landwirtschaftliche Genossenschaftspraxis* No 18, Berlin, 30 September 1921

The annual congress convened by the National Federation of German Agricultural Co-operative Societies (*Reichsverband der deutschen landwirtschaftlichen Genossenschaften*) took place this year at Lubeck on 15 and 16 September.

At the beginning of the congress a report was presented on the development of agricultural co-operation in Schleswig-Holstein.

The co-operative movement began to develop in the northern frontier province later than in other parts of Germany, because there usury and other forms of exploitation which drove small cultivators to organize were little known. Co-operative societies found the most propitious soil in the so called *Geestdistrikte*, where small agricultural holdings predominate. In the east large properties are very common, with a system of temporary letting which is unknown in other parts of the country. But the tenants are often disinclined to meet their landlord in co-operative societies, fearing to let him know their affairs. Consequently the number of co-operative societies in the eastern districts is very small. The total number of co-operative societies is 843, and of these most are co-operative credit societies: next come those for the purchase of requisites. Although stock-

breeding and dairying are the chief branches of the agricultural activity of the country, yet the co-operative sale of milk and its products is almost unknown. Every attempt to encourage it has hitherto failed. Nearly all the agricultural co-operative societies of Schleswig-Holstein are united in a Federation.

Next came the report on the condition of agricultural co-operation for the whole of Germany during the last year. On 1 June 1921 there were in the country in round numbers 45,000 co-operative societies of which 33,635 were agricultural. Of these 21,932 belong to the National Federation, which with a total of 2,500,000 members is one of the largest agricultural organizations in existence. The credit organization of the Federation, to which are affiliated 25 central banks, showed in the year in question a total business (incomings and outgoings) to the amount of 134,000,000,000 marks. In the goods branch, for the purchase and sale of agricultural produce, the total business done was 2,795,000,000 marks, as compared with 780,000,000 marks in the preceding year. With regard to co-operative dairy societies, an increase has been observed for the first time in four years. The owned capital increased during the current year in nearly all the co-operative societies, owing to the propaganda carried on by the National Federation; nevertheless it is not yet considered sufficient to meet future requirements. Under these circumstances the Central Banks desire to enter into closer relations with the Central Co-operative Bank of Prussia.

The general discussion culminated in the conclusion that agricultural co-operation, being a purely economic organization, should keep clear of all parties. The efforts of the co-operative movement in Germany tend to draw the producer and the consumer closer together through the direct exchange of produce by means the co-operative system, thus contributing to eliminate the economic opposition between town and country.

Stuttgart was selected as the place at which the Congress of the National Federation will be held in 1922.

ITALY.

1. THE RECENT PROVISIONS REGARDING THE NATIONAL CREDIT INSTITUTE FOR CO-OPERATION AND ITS WORK IN 1920. — ISTITUTO NAZIONALE DI CREDITO, PER LA COOPERAZIONE · ASSEMBLEA GENERALE ORDINARIA DEI PARTECIPANTI TENUTA IN ROMA IL 30 MARZO 1921. ANNO SETTIMO. Rome, 1921. — LDGGE 7 APRILE 1921, N. 456 CONCERNENTE PROVVEDIMENTI PER L'ISTITUTO NAZIONALE DI CREDITO PER LA COOPERAZIONE. *Gazzetta Ufficiale del Regno d'Italia*, No. 94. Rome, 2 April 1921. — REGIO DECRETO 31 LUGLIO 1921, N. 1073 CHE RECA PROVVEDIMENTI PER L'ISTITUTO PREDETTO. *Gazzetta Ufficiale del Regno d'Italia*, No. 192. Rome, 13 August 1921.

In recent years the co-operative movement in Italy has made remarkable progress. On 15 July 1920, according to official statistics (1) there were in fact in the kingdom 15,099 co-operative societies legally

(1) See *Bollettino del Lavoro e della Previdenza Sociale*, published by the Ministry of Labour and Social Thrift, No. 5. Rome, May 1921.

constituted, and between 16 July 1920 and 31 March 1921, 4,411 others were formed, making a total of 19,510 societies. In proportion to the increase in their number was the increase in their business. It therefore became an urgent necessity to provide for the financial requirements of the co-operative societies, and by a Law of 7 April 1921, No. 456, the capital of the National Credit Institute for Co-operation, by which they are financed, was raised by payments made by the State, to 200,000,000 liras. Including the two sums appropriated for the Building Section and the Land Section, the capital will reach a total of 300,000,000 liras. By means of this it will be possible to carry out a programme of financial assistance, corresponding to the new requirements of the co-operative movement, which in the post-war national economy has assumed a most important function, taking a leading part in the economic reconstruction of the country. Subsequently by the Decree of 31 July 1921, No. 1,073, the composition of the committee of management of the Institute was modified. It will now contain 15 members, five of whom will be appointed by the Ministries of Labour, of Industry and Commerce and of Agriculture, one for each, and two by the Treasury, from among their respective officials; five designated by members, and five representing the co-operative movement. Reserving for another occasion the explanation of the new regulations to be given to the Institute by a provision of the same Decree in place of those now in force in virtue of the Royal Decree of 15 August 1913, No. 1140, the Lieutenantcy Decree of 7 March 1918, No. 369 and the Royal Decree of 4 March 1920, No. 337, we here give some particulars respecting its work in 1920.

Co-operation for Production and Labour. — In that year — the seventh from the foundation of the Institute — on the security of 656 agreements for the assignment of orders to pay issued by public administrations, loans to the total amount of 142,470,124 liras were granted to 380 consortia and co-operative societies for works representing in all more than 218,000,000 liras. If to the new agreements be added those previously concluded, and still in force on 31 December 1920, we obtain a total of 1,505 agreements with 1,034 clients assigning orders to pay amounting to 390,329,530 liras as security for loans of 206,443,541 liras granted. The co-operative activity in Venetia was remarkable: of works of a total value of 500,000,000 liras for the reparation of war damages entrusted to private and public bodies, works to the value of 200,000,000 liras were entrusted to co-operative societies and their consortia.

From information collected it appears that at the close of 1920, the co-operative labour societies and their consortia financed by the Institute numbered 1,621, contained 286,000 members, and had capital and reserve funds amounting to 30,000,000 liras.

They had work in progress under contract with the State, with communes, with provinces, and with private persons, to the value of more than 670,000,000 liras, they possessed plant and materials to the value of about 230,000,000 liras, and had paid more than 216,000,000 liras in wages.

The Institute, wishing to increase labour co-operation in the south

of Italy subscribed 500,000 liras to the foundation of the "Institute for Public Works in the Southern Provinces," and encouraged the undertakings of the *Opera Nazionale per i Combattenti*.

To enable the co-operative labour societies in the Venetian provinces, to obtain credit more easily, it obtained an advance of 30 millions from the Federal Institute of Credit for the Restoration of Venetia. On the other hand, the banks of emission were authorized by a Law of 26 September 1920, No. 1,495, to discount up to 100,000,000 liras, bills guaranteed by the assignment of orders to pay issued by public administrations in respect of contracts.

Co-operative Distributive Societies. — These societies have been financed to the extent of upwards of 80,000,000 liras, of which 57,500,000 liras were advanced to societies in North Italy, 10,000,000 liras to societies in Central Italy, and 12,500,000 liras to societies in South Italy.

Co-operative Land-holding Societies. — These societies were granted loans to the amount of more than 56,500,000 liras, of which more 45,500,000 liras were granted to societies in North Italy, 9,500,000 liras to societies in Central Italy, and 1,258,200 liras to societies in South Italy. Credit was granted to 820 societies with 137,000 members, having the management of 100,000 hectares of land, 15,000 of which were their own property, and to 22 *università agrarie* with 185,000 members, cultivating 121,000 hectares of land.

In the province of Ravenna the co-operative societies taken together possess more than 12,000 hectares of land; in the province of Reggio about 1,000 hectares; in Venetia about 1,000 hectares, and an equal amount in the province of Parma. Considerable purchases were made in Piedmont, Lombardy, and the provinces of Bologna and Ferrara, in Apulia, Calabria, and other parts of Italy either to form large holdings to be managed directly by the societies or to be divided into small holdings. By forming federal bodies by which to strengthen themselves, such as the Consortium of Co-operative Land-holding Societies in Bologna, the Agricultural Technical Department of the Bank of Labour and Co-operation, the Agricultural Interprovincial Federation of Milan, and the Federation of the *università agrarie* of Latium, the co-operative societies and the *università agrarie* have now secured for their own advantage the continual and efficacious technical and administrative assistance required for the management of their land.

By a Decree of 22 April 1920, No. 516, a Land and Agricultural Credit Section was formed at the National Credit Institute for Co-operation for giving credit by means of loans for the management and cultivation of land, loans for improvements and mortgage loans to *università agrarie* and to co-operative societies or other legally recognized associations of agricultural labourers.

The Section possesses an initial capital of 50,000,000 liras half of which is a special contribution from the State, which has also granted to it advances of 50,000,000 liras.

The Institute carries on other branches of work to which we cannot

now refer, and it has initiated special undertakings, among which are those respecting the School of Co-operators, the Offices for the Inspection of Co-operative Societies, etc.

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2. THE WORK OF THE "ISTITUTO DI CREDITO PER LE COOPERATIVE" IN 1920.
— ISTITUTO DI CREDITO PER LE COOPERATIVE. RELAZIONE E BILANCIO APPROVATI DALL'ASSEMBLEA DEGLI AZIONISTI DEL 14 APRILE 1921 XVI ESERCIZIO. Milan, 1921.

The year 1920 was the 16th working year of the *Istituto di credito per le cooperative* as it was formed at Milan, on the initiative of the Humanitarian Society, in 1904. It is one of the oldest organizations of which the special object is to provide credit for co-operative societies.

The total business done (incomings and outgoings), which amounted to 370,000,000 liras in 1918 and to 700,000,000 liras in 1919, rose to 1,328,134,408 liras in 1920. The total of cash receipts and expenditure rose from about 80,000,000 liras in 1918 to 160,000,000 liras in 1919 and to 391,074,970 liras in 1920. The total value of the bills discounted, which amounted to about 65,000,000 liras in 1919, rose in 1920 to 114,974,785 liras, which were thus divided:

Co-operative societies for production and labour	58,615,862 liras
Co-operative distributive societies	28,488,526 »
Agricultural co-operative societies	7,550,990 »
Co-operative building societies	3,734,100 »
Co-operative credit societies	243,000 »
Miscellaneous co-operative societies and individuals	16,342,307 »
Total	114,974,785 liras

The modest financial resources of this institution, which included on 31 December 1920 share capital amounting to 1,624,500 liras and reserves to the amount of 489,308 liras, were supplemented by the liberal support of stronger institutions and by the growing confidence of the depositors; the various classes of deposits, which amounted to about 3,500,000 liras in 1918, rose to about 5,000,000 liras in 1919 and to 8,733,796 liras at the end of 1920.

But though the business done in the course of the year under review was large, the profits realized were small. In fact, they only amounted to 70,697 liras. It was necessary, in order to carry on the business, to rediscount a large proportion of the bills discounted, and this almost completely absorbed the profits of the year. To overcome this difficulty it was seen that it would be necessary to increase the financial resources of the institution. For this purpose the Committee has recently appealed

to the members to assist in strengthening the institution, and by a resolution passed at an extraordinary general meeting held on 15 November last the share capital was increased to 5,250,000 liras (1).

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3. THE NATIONAL BANK OF ITALIAN RURAL BANKS. — RELAZIONE PER IL 1920 DEL CONSIGLIO DI AMMINISTRAZIONE E DEI SINDACI ALL'ASSEMBLEA GENERALE ORDINARIA DEI SOCI IN ROMA (24 MARZO 1921). Rome, 1921.

This Bank was formed in 1915 for the purpose of granting loans for ordinary agricultural operations through the medium of rural banks and of societies composed of small farmers. By its enlightened management it has fully achieved the various objects which it has in view, amongst which was that of exercising a moderating influence; to do this, it had to discount bills at the lowest possible rates, which it succeeded in doing by reducing its management expenses to a minimum. The development of this institution may be seen from the following figures which we extract from the latest published report.

The total amount of the bills discounted in 1920 was 10,789,792 liras, an increase of more than 3,500,000 liras on the total of the previous year.

In the past six years the total amount of the loans granted by the Bank was as follows:

1915.	948,829 liras
1916.	2,690,411 »
1917.	3,096,067 »
1918.	4,914,493 »
1919.	7,265,822 »
1920.	10,789,792 »
Total . . .	29,704,414 liras

On 31 December 1920 the deposits amounted to 2,018,818 liras, an increase of 174,952 liras over the total in 1919.

As the report shows, the increase would have been greater if, during the last months of 1920, the agricultural societies, which are amongst the largest depositors, had not been obliged to pay larger sums than in the previous year for the purchase of sulphate of copper, superphosphate, and other agricultural requisites.

The share capital rose from 123,500 liras on 31 December 1919, to 174,500 liras at the end of 1920, an increase of 51,000 liras due for the most part to additional shares subscribed for by existing shareholders

1) See *La Cooperazione italiana*, No. 1479. Milan, 18 November 1921.

SWEDEN.

CO-OPERATIVE DAIRIES IN 1919 — *MEJDERIHANTERING ÅR 1919 AV KUNGL. STATISTIKA CENTRALBYRÅN (L'Industrie laitière en 1919, par le Bureau Central de Statistique)* Stockholm, 1921

Swedish dairies are of four different kinds. The *co-operative dairies* are associations of milk producers for the utilization of the milk of their cows, and sometimes also of that supplied by other producers, as well as for the sale of dairy produce for the common benefit of the members. *Farm dairies* are those in which the milk comes exclusively or for the most part from the proprietor's own farms. *Purchasing dairies* handle milk and cream bought from producers. Intermediate between these two last categories there are the *farm and purchasing dairies* which handle milk from the proprietor's own cows but to a greater extent milk purchased from other producers. Table I shows the number of dairies of different kinds divided between the country and the towns in 1919, and the total number of these dairies in each year since 1913.

TABLE I — *Division of Dairies between the Country and the Towns.*

	Country	Towns	
Co-operative dairies	471	56	532
Farm dairies	230	—	230
Farm and purchasing dairies	133	1	134
Purchasing dairies	500	54	554
Total 1919	1,339	111	1,450
1918	1,417	78	1,495
» 1917	1,652	110	1,762
» 1916	1,587	111	1,698
» 1915	1,554	109	1,663
» 1914	1,521	106	1,627
» 1913	1,537	113	1,650

The number of milk suppliers to the dairies was 87,629 of whom 59,136 supplied milk to co-operative dairies, and 29,493 to other dairies.

The quantity and the value of the milk and cream supplied to the dairies are shown in Table II (page 662).

The average price per kilogramme of milk was 32.2 öre in the co-operative dairies, and 33.7 öre in other dairies. The reason of the inferiority of the price in the co-operative dairies is that they often return to the suppliers, gratis or at a small price, the skimmed milk and the buttermilk.

The quantity and value of all kinds of dairy produce in 1919 are shown in Table III (page 662).

TABLE II. — *Produce handled by the Dairies.*

	Milk			
	Weight in thousands of kilos	Value in crowns	Weight in thousands of kilos	Value in crowns
Co-operative dairies	451,789	145,612,661	922	1,396,223
Other dairies	242,744	81,739,921	115	927,528
Total 1919	694,533	227,352,588	1,337	2,323,751
» 1918	571,113	158,083,510	1,351	1,740,970
» 1917	931,998	165,305,579	1,384	1,806,555
» 1916	1,121,929	148,998,068	1,330	1,037,465
» 1915	1,066,586	122,217,065	1,227	910,414
» 1914	1,238,609	112,149,732	1,696	1,082,800
» 1913	1,274,108	111,669,123	3,198	2,235,525

TABLE III. — *Quantities and Value of Produce disposed of by the Dairies.*

	Co-operative dairies		Other dairies		All dairies	
	Weight in thousands of kilos	Value in thousands of crowns	Weight in thousands of kilos	Value in thousands of crowns	Weight in thousands of kilos	Value in thousands of crowns
Whole milk sold	118,342	52,084	67,977	27,529	186,326	79,613
Cream sold	13,747	25,957	6,277	12,361	20,024	38,321
Butter	9,789	61,612	2,641	16,505	12,433	78,117
Whey butter	7	38	67	356	74	394
Cheese	1,510	5,798	6,484	24,468	7,994	30,266
"Mesost" cheese	213	414	518	744	761	1,158
Derivatives of milk	—	—	608	1,158	608	1,158
Skimmed milk:						
returned gratis to suppliers	71,970	3,886	2,998	174	74,968	4,060
sold to suppliers	137,842	7,375	34,590	2,001	172,432	9,376
sold to others	48,669	8,771	25,706	4,162	74,375	12,933
used for feeding young stock	478	24	6,616	511	7,094	535
Buttermilk	15,818	1,157	3,844	282	19,662	1,439
Whey	7,595	156	47,925	1,019	55,520	1,175
Total 1919	—	167,272	—	91,273	—	258,545
» 1918	—	117,383	—	63,964	—	181,347
» 1917	—	122,619	—	68,012	—	190,661
» 1916	—	112,566	—	59,835	—	172,401
» 1915	—	81,973	—	59,888	—	141,861
» 1914	—	75,044	—	54,137	—	129,181
» 1913	—	73,355	—	56,484	—	129,839

The direct sale of whole milk is made on a smaller scale in co-operative dairies than in the others. Of 1,000 kilogrammes of milk and cream supplied to co-operative dairies 256.7 kilogrammes of milk are sold, but in the other dairies 275.3 kilogrammes. On this point there is a marked difference between country and town dairies.

Of these last the chief object is often to sell milk, and they only convert a small part into butter or cheese. For the others on the contrary the principal business is to manufacture butter, cheese and other products.

The sale price per kilogramme of whole milk was on an average 44 öre in co-operative dairies and 40.5 in the others. The difference between the average price per kilogramme of whole milk received and sold, that is the gross profit of the dairies, was 11.8 öre in the co-operative dairies and 6.8 öre in other dairies.

Butter making was of much greater importance in co-operative dairies than in the others; the first produced 21.2 kilogrammes per thousand kilogrammes of milk and cream and the others only 10.7 kilogrammes. To produce a kilogramme of butter in co-operative dairies required on an average 25.6 kilogrammes of whole milk, and in the other dairies 26.1 kilogrammes. In all, for the production of butter about 321 millions of kilogrammes of whole milk were used. The average price of butter per kilogramme was 628 öre.

With regard to cheese-making 5,404,788 kilogrammes of cheese of the first quality were produced 2,227,366 kilogrammes of the second quality and 361,807 of the third quality; the prices per kilogramme were respectively 414,321, and 213 öre. The co-operative dairies manufactured 3.6 kilogrammes of cheese per 1,000 kilogrammes of milk and cream, the other dairies 28.5 kilogrammes. The total consumption of milk for cheese-making was about 79,000,000 kilogrammes of whole milk and 35,000,000 kilogrammes of skimmed milk. As to the use of skimmed milk there is an essential difference between the co-operative dairies and the others. The co-operative dairies returned 27.8 per cent. gratis to the suppliers and sold 53.2 per cent. to them at a low price; the others only returned 43 per cent. and sold 49.5 per cent. Of the remainder the co-operative dairies sold 18.8 per cent. to the public, and used 0.2 per cent. for feeding young stock, while for the other dairies the corresponding proportions were respectively 36.8 per cent. and 9.4 per cent. The prices were on an average 5.4 öre per kilogramme sold to the suppliers and 17.4 öre to the public; for feeding young stock the average price was 7.5 öre.

The working expenses of the co-operative dairies amounted to 17,859,276 crowns, which corresponds to 38 crowns 74 öre per 1000 kilogrammes of milk and cream.

Part II: Insurance and Thrift

MISCELLANEOUS INFORMATION RELATING TO INSURANCE AND THRIFT.

AUSTRIA.

THE LAW OF 21 OCTOBER 1921 EXTENDING INSURANCE AGAINST SICKNESS TO PERSONS ENGAGED IN AGRICULTURE. — *Ämtliche Nachrichten des Österreichischen Bundesministeriums für soziale Verwaltung*, No 20-21, Vienna, November 1921.

By the Law of 21 October 1921, that of 30 March 1888 relating to the compulsory insurance of work-people against sickness has been extended to agricultural labourers. In view of the special circumstances under which agriculture is carried on, care has been taken to introduce certain modifications into the existing organization of insurance against sickness. The principal points of this new law are as follow :

The insurance of persons occupied exclusively or principally in agriculture is effected by societies for the insurance against sickness of persons engaged in agriculture (§ 5). It is obligatory that such a society (*Landwirtschaftskrankenkasse*) be formed at the seat of political authority, for a whole province or for a group of districts forming a homogenous unit, but in this last case, only if the total number of insured persons regularly engaged in agriculture reaches at least 5,000 for the territory in question. The preparation and execution of the plan of organization is entrusted to the provincial authority which is expected to obtain advice from the vocational organizations of the insured persons pursuing agricultural occupations (§ 6). From the day of entering on an agricultural undertaking, those doing so become automatically members of a society of this kind. Nor can a member withdraw from the society during the continuance of the occupation in respect of which insurance is obligatory and in virtue of which he became a member (§ 7). The contributions towards the insurance must be paid by employers and work-people, each of these bearing half the burden. The choice of members of the assembly of delegates, of the president and officers, of the committee of supervision and of the arbitration committee is made in such manner that three fifths of the officers and committeemen will be insured persons and two fifths employers

(§ 10). The insurance societies are under an obligation to furnish free medical attendance to the children of the insured person who are not more than 16 years of age, who are living with him, and for whom there is no compulsory insurance. (§ 11). The provincial authority can take steps to dissolve a society for insurance against sickness of persons engaged in agriculture: (a) if the number of the members is always less than 5,000; (b) if the society becomes insolvent; (c) if the proposal for dissolution is passed at the general assembly by a majority of two thirds of the members present (§ 9).

For the realization of their common aims, and in particular for the purchase of medicine, for the establishment of convalescent homes and pharmacies, for the drawing up of statistical tables, etc., all the societies of a province are grouped into a provincial federation (§ 14).

The rules of each federation are drawn up by the provincial authority, after consultation with the insurance societies, in accordance with the model rules prepared by the Ministry of Social Administration (*soziale Verwaltung*), in conjunction with the Ministry of Agriculture and Forests. The insured persons and the employers have to take part in the management and supervizing committees of the Federation in the same proportions as are laid down for the societies (§ 15).

The provincial Federations and the societies will be affiliated to a National Federation of Societies for the Insurance against Sickness of Persons engaged in Agriculture (*Reichsverband der Landwirtschaftskrankenkassen*). Of the officers and committeemen of this Federation three fifths are representatives of insured persons and two fifths representatives of employers. These representatives are nominated by the provincial federations or by the societies affiliated to the National Federation (§ 16). The provincial federations and the national federation are legally recognized bodies. They are under Government supervision, this supervision being exercised by the Ministry of Social Administration in conjunction with the Ministry of Agriculture and Forests (§ 17).

FRANCE.

AGRICULTURAL, MUTUAL, INSURANCE SOCIETIES IN 1920. — RAPPORT DU MINISTRE DE L'AGRICULTURE AU PRÉSIDENT DE LA RÉPUBLIQUE FRANÇAISE SUR LE FONCTIONNEMENT DES SOCIÉTÉS D'ASSURANCE ET DE RÉASSURANCE MUTUELLES AGRICOLES EN 1920. Paris, 1921

The number of agricultural mutual insurance and reinsurance societies in receipt of state subsidies, which stood on 31 December 1919 at 14,400, reached 14,562 at the end of 1920, an increase of 162.

The departments having at the present time the greatest number of societies are: Landes, 1,275; Haute-Marne, 817; Haute-Saône, 581; Basses-Pyrénées, 523; Pas-de-Calais, 441; Vosges, 403; Doubs, 399; Jura, 396; Isère, 391.

The following is a statement of the position of the several kinds of insurance:

1. *Live Stock Insurance.* — On 31 December 1919, 10,071 local mutual insurance societies containing 503,056 members, and assuring a capital of 649,179,905 francs, had been subsidized. On 31 December 1920, 10,138 such societies had received subsidies; their membership was 504,773, and the assured capital 656,915,590 francs.

Departmental or district reinsurance associations receiving subsidies numbered 75 at the end of 1919; the capital reassured amounted to 183,414,364 francs. At the present time the number is 76, with a reassured capital of 224,737,518 francs.

The departments containing the greatest number of subsidized live stock insurance societies are: Landes, 1,259; Haute-Saône, 418; Haute-Marne, 381; Somme, 338; Pas-de-Calais, 309; Jura, 203; Basses-Pyrénées, 290; Doubs 270; Yonne 268, etc.

There are in existence two large associations for reinsurance in the third degree against mortality amongst live stock. One of these, the National Association for Reinsurance of Agricultural Mutual Insurance Societies, at Paris, is subsidized; it has 25 affiliated departmental or district associations representing 1,354 local societies with a membership of 30,118 and a reassured capital of 125,152,178 francs. The other, the Central Association of Agricultural Mutual Insurance Societies, at Paris, is not subsidized; it reinsures three district associations representing 249 local associations with a membership of 3,471 members, and a reassured capital of 4,513,518 francs.

2 *Fire Insurance.* — The number of subsidized local associations for mutual insurance against fire, has increased from 4,123 with an effective membership of 100,341 at the end of 1919 to 4,213 with an effective membership of 101,708 at the end of 1920. The assured capital in the same period rose from 1,136,442,239 francs to 1,163,152,499 francs.

The subsidized departmental and district associations for insurance against fire in December 1919 were 35 in number with 3,695 affiliated local societies having an effective membership of 128,433, and a total reassured capital of 1,235,423,803 francs. At the end of 1920, these 35 societies included 3,747 local societies, with an effective membership of 115,584 and a reassured capital of 1,440,512,485 francs.

The departments having the greatest number of subsidized fire insurance societies are: Haute-Marne, 432; Deux-Sèvres, 240; Basses-Pyrénées, 231; Drôme, 199; Isère, 183; Aube, 177; Haute-Saône, 160; Vosges, 153; Loire, 148; Aveyron, 146.

There also exist two large associations for reinsurance against fire in the third degree, one of which is subsidized, the National Association for the Reinsurance of Agricultural Mutual Insurance Societies, Paris. This association reinsures 20 district and departmental reinsurance societies, which represent in all, 1,823 local associations with a total membership of 57,697. The reassured capital amounts to 211,814,809 francs.

The Central Association for the Reinsurance of Agricultural Mutual Insurance Societies, Paris, which is not subsidized, reinsures 16 district

associations representing an effective membership of 78,700. The measured capital amounts to 305,059,707 francs.

3. *Hail Insurance.* — The number of subsidized societies for mutual insurance against hail remains at the end of December 1920 the same as at the end of 1919, namely 28. These societies nearly all have a department as their area of operations. The membership fell from 37,780 to 36,343, but the value of the crops insured rose from 31,524,892 francs to 33,774,245 francs. This figure seems extremely low if compared with the total value of the crops produced in France. This backwardness in the development of mutual insurance against hail is partly explained by the difficulties encountered by reason of the special character of the risks to be covered; these risks are heavy, but vary greatly as to frequency and affect different areas and crops unequally. Another hindrance to development, probably the most important, arises from the irregular nature of the losses incurred. Statistics show that in a definite area serious falls of hail recur at intervals covering a fairly constant number of years; from this the Report of the Minister of Agriculture draws the conclusion that it is first and foremost indispensable that hail insurance societies should be in a position to build up for themselves from the first years of their operations reserve funds of some importance so as to guarantee them against the recurrence after an unexpectedly short interval of a catastrophe in their area of operations. They will achieve this by a system of levying premiums on their members, premiums which must be calculated by taking account of the nature of the insured crops, and also by using as a basis the very valuable local and regional statistics which establish year by year the frequency of the falls of hail, and the estimated amount of the losses incurred. Further, the Report suggests that considerable state subsidies should be granted to the societies, and particularly to the reinsurance associations at the time of their formation and in the course of their first years of working. These subsidies, in the first instance considerable, would tend to decrease in proportion as the reserve funds of each association became larger.

4. *Accident Insurance.* — The number of subsidized societies for mutual insurance against accidents in agricultural work was increased by three in the course of the year 1920. There are in existence at present 68 subsidized local insurance societies, with 6,991 members, and 33,904 insured persons and one district association for reinsurance, viz.: the Touraine Agricultural Mutual Insurance Society, acting throughout the whole of the department of Indre-et-Loire and the neighbouring departments. This association includes 60 affiliated local associations.

The department of Indre-et-Loire is moreover the one which has by far the greatest number subsidized societies for mutual insurance against accidents (57).

It is in fact opportune to remark that since the end of 1920 a subsidized association for reinsurance in the third degree has come into existence, the National Association for Reinsurance of Mutual Societies for Insurance against Accidents in Agricultural Work with offices in Paris. This started work in December 1920, and reinsures on the one hand the

district and departmental associations for insurance against accidents, and on the other, the isolated local associations in districts where no reinsurance association exists

The progress made by the societies for mutual insurance against accidents seems slower than that made by the fire insurance or live stock insurance societies. This is however easily explicable if the fact is taken into account that the Bill to extend to agriculture the legislation relating to workmen's accidents has not yet been definitely adopted. This Bill was passed by the Senate on 23 December 1920, but on account of the modifications which have been made in the original text drawn up in 1915, it has to go back again to the Chamber of Deputies. The societies for mutual insurance against accidents in agricultural work have to serve as the basis from which to put into application this new text, so that many agriculturists hesitate to form societies which will be obliged eventually to undergo transformation in order to adapt themselves to the new legislation on its adoption.

We may nevertheless call attention to the fact that the creation in 1920, by the National Association for Reinsurance of Agricultural Insurance Societies, of a section for accidents, obviously seems to create favourable conditions for the constitution of new local societies for insurance against this kind of risk, since there is thus an opportunity for them to reinsure themselves either through a district or departmental association, or even directly with the National Association if they are isolated in a district where no association for reinsurance exists.

State Subsidies. — In 1919 a sum of only 871,500 francs was voted for granting subsidies to agricultural mutual insurance and reinsurance societies. In consequence of the increase of credits voted by Parliament for the budget of 1920, there were allocated in that year to the various institutions more numerous and larger subsidies. It was in fact indispensable to encourage a great number of societies that were in process of formation, as well as those which had been hard hit by the war and were struggling to reconstitute themselves. On the other hand it was necessary to increase the amount of the subsidies given though it was impossible to make more than a very imperfect estimate of the considerable increase in the value of stock, as well as of crops, buildings and other property insured during the course of the last few years. The total amount of the subsidies granted in 1920 was 1,275,200 francs, which was divided as follows:

Live stock insurance and reinsurance societies	934,000 francs
Fire insurance and reinsurance societies	288,900 »
Hail insurance and reinsurance societies	17,000 »
Accident insurance and reinsurance societies	35,300 »

Part III: Credit

MISCELLANEOUS INFORMATION TO RELATING CREDIT

CHILE.

THE PRINCIPAL TRANSACTIONS OF THE MORTGAGE CREDIT BANK OF CHILE
IN THE YEAR 1920. — *La Información*, Year VI, No. 39. Santiago, February 1921.

From the Annual Report of the Mortgage Credit Bank of Chile, for the year 1920, we find that the loan transactions of that year exceeded in number, but were inferior in total amount to those of 1919. In fact, while in 1919 they numbered 584, and amounted to 74,088,300 pesos, in the preceding year they were 605 and amounted to 64,361,000 pesos.

Of the 605 loans, 378 were urban, to the amount of 27,351,100 pesos and 227 rural, to the amount of 37,010,100 pesos. The loans were for the most part contracted at a rate of interest of 7 or 8 per cent.

As in preceding years the loans were chiefly for small sums; in fact, 187 were under 20,000 pesos and of these 76 varying from 1,000 to 10,000 pesos were free of all expense to the borrowers.

The half yearly payments of 8 per cent. and 7 per cent., due in respect of four fifths of the loans outstanding during the year, which in the previous year were made in January, were deferred by the Directors for three months, because the month of January is that in which the agriculturist has the greatest expenses for seed, etc.

The Directors have also decided to issue a new series of loans at 8 per cent. interest and $\frac{1}{2}$ per cent. sinking fund, exempt from commission, fixing as the dates of payment of the half-yearly charges from 1 to 15 April, and 1 to 15 October of each year.

The actual holders of loans at 8 per cent. with 1 and 2 per cent. sinking fund and $\frac{1}{4}$ per cent. commission may, with evident advantage, convert their present loans into new and less burdensome ones.

The suppression of the commission and the deferred payment of the interest mean a diminution of income to the Bank, which however it will be able to meet owing to the amount of its reserve fund, and to profits accruing from the sale of securities, etc.

The Bank also proposes to alter the system of valuing the lands which guarantee the loans, in order that it may be carried out without burdening the borrowers, as is the case at present when the loans do not exceed 10,000 pesetas.

The two Savings Banks of Chile, the National Bank and that of Santiago, which are under the control of the Mortgage Credit Bank, are continuing their work of colonization begun in 1910 with the formation of rural and urban settlements, among which the *Población Agrícola de Graneros*, inaugurated in December 1915, deserves special mention.

In the *Población Agrícola de Graneros*, already mentioned in this Review, land has up to the present time been sold to the value of 1,337, 134.40 pesos and the mortgage charges on this land amount to 826,907 pesos. The urban and agricultural land not yet sold is valued at 240,000 pesos.

The Savings Bank of this colony has continued its work, granting small loans to the proprietors and cultivators of the *granjas*.

Special mention should be made of the agricultural loans granted by this savings-bank as they are an experiment made by the Directors of the bank in preparation for a larger system of agricultural banks.

CZECHOSLOVAKIA.

CREDIT FOR LAND IMPROVEMENT IN BOHEMIA — *Bulletin du Ministère de l'Agriculture de la République Tchécoslovaque*. Prague, 1 October 1921

In 1889 the unfavourable conditions of communal credit and of land improvement credit led the Diet of Bohemia to establish the Bank of the Kingdom of Bohemia, a public institution, not working for profit, and therefore in a position to grant loans on moderate terms to districts, communes, and public corporations, and to furnish credit for land improvement, for the construction of local railways, etc. The principal work of the Bank is to lend money to public authorities and corporations empowered to impose additional local taxation to cover their expenses. But the granting of loans for land improvement is a considerable item in its business.

These loans are granted to landowners, and especially to associations formed for drainage works and other improvements. The interest is 4 per cent. per annum plus a contribution to the general expenses, which usually amounts to $\frac{1}{2}$ per cent. These loans are repayable by equal annual instalments, but the debtor has the right to pay off at any time either the whole or any part of them.

The bank raises the funds for these loans by issuing bonds, called land improvement bonds, at 4 per cent. The payment of the interest and the repayment of the nominal value of these bonds are guaranteed in the first place by the value of the property for the improvement of which the loans were granted, and secondly, by the country of Bohemia. The land improvement bonds are issued of the values of 100, 500, 1,000, 5,000, and 10,000 florins, with coupons payable on the 1 May and 1 November, and of 200, 1,000, 5,000, and 10,000 crowns with coupons payable on 1 February and 1 August of each year. These bonds are redeemable at par by drawing lots, after a maximum period of 50 years for the first and 78

for the second. By a Law of 6 April 1890, the property of minors, of benevolent institutions, of public institutions and of institutions of public utility may be invested in these bonds.

On 31 December 1920, the land improvement loans amounted to 18,971,290 crowns, and the bonds in circulation to 18,886,800 crowns.

HOLLAND.

RURAL, MORTGAGE CREDIT — *VERSLAGEN EN MEDEDEDELINGEN VAN DE DIRECTIE VAN DER LANDBOUW (Reports and Communications of the Agricultural Department), 1921, No. 3. The Hague, 1921*

Since the outbreak of war, rural mortgage credit in Holland has passed through two very different phases. Whereas in 1913, it reached a total of 62,076,361 florins, in 1914 it fell to 58,482,448 florins and in 1915 to 40,089,694 florins. Certain provinces however reduced their mortgage indebtedness in an even larger measure: for example, Brabant, where the rural mortgage debt fell from 7,148,088 florins in 1914 to 2,190,272 florins in 1915. The cause of this reduction was, in a great measure, the fact that the peasants, in the hope of less troublous times, did not renew their live stock nor their farm implements, and did not undertake improvements or repairs on a large scale of their plant, buildings, etc.

The rise in prices which has since followed brought about a renewal of activity in the loan market. The sum-total of rural mortgages reached 109,577,007 florins in 1918, 139,946,267 florins in 1919, 167,946,456 florins in 1920. This increase affected all the provinces of Holland: there is, however, noticeable a drop in the figures relating to Groningen and Friesland during this latter period. In Groningen the total figure representing the rural mortgages fell from 13,458,972 florins in 1919 to 12,328,115 florins in 1920; in Friesland the fall was still more marked, the figures of 1920 being only 9,877,024 florins as compared with 12,054,492 in 1919.

UNITED STATES.

THE BANKERS' LIVESTOCK LOAN CORPORATION — *Northwestern National Bank Review*, Vol. XIII, No. 4; Minneapolis, July 1921. *Economic conditions: Governmental Finance: United States Securities* (Monthly letter issued by the National City Bank of New York). New York, August 1921.

A need for the stimulation of the cattle industry has arisen as a result of recent disastrous conditions, and at the instigation of the Government a group of eastern and western bankers, during June, formed the Banker's Livestock Loan Corporation. This is a \$50,000,000 live stock loan pool which will effect a concentration of resources not otherwise available for the longer maturities which are considered to be necessary to rehabilitate the industry; it is also expected to be of assistance to many banks

in the cattle country, in that the new funds thus provided will make possible, in many cases, more gradual liquidation of previous negotiations.

The pool has already begun to make loans and it is reported from the Southwest that the plan is meeting with a favourable reception from the cattlemen. Steps have been taken to make negotiations of a loan from the pool as simple as possible. Applications are made through local cattle loan companies or through banks, and the deciding factor in determining the percentage to be loaned against a given herd is governed by the individual's credit standing in his own community, and by his probable ability to meet his obligations as they mature. Loans are being made on a six months basis so that the paper will be rediscountable at the Federal Reserve Banks, but may be renewed up to a maximum of 30 months.

URUGUAY.

NEW TYPES OF AGRICULTURAL LOAN MADE BY THE MORTGAGE BANK FOR THE ENCOURAGEMENT OF COLONIZATION. — *Boletín de la Comisión Nacional de Fomento rural* Montevideo, June, and July 1921.

By the Law of 17 June 1921, the Mortgage Bank of Uruguay has been authorized to grant loans on agricultural land to the maximum limit of 15 % of the total amount of each series of mortgage-bonds issued by the said Bank.

Under this percentage are included both the loans obtained directly by the State and those obtained by private undertakings.

The Bank has power to grant loans up to 85 % of the value of the lot or holding which serves as security for the loan, provided that the purpose of the loan is to encourage colonization.

By this law it is enacted in addition that for the better development of the cultivation of land not previously cultivated, the Colonization Commission shall have power, subject to the consent of the Mortgage Bank, to acquire land for the purpose of parcelling it out and allotting it to colonists. For this purpose, the Colonization Commission is empowered to request the technical departments of the Ministry of Industries specially concerned to supply the data relating to the condition of the lands that are to be acquired, to their special fitness in respect to the different types of agriculture, etc, the inquiry being in such form as may be specified in the regulations issued by the Government.

The Colonization Commission, however, as well as private enterprises, will act as intermediaries simply and in what has to do with lands not yet assigned to colonists, they will be under the ordinary regime of the Mortgage Bank.

The obligations of every colonist benefiting by the loan are as follows: to live on the holding assigned to him, to cultivate the land himself or with the aid of his family, to carry on there agriculture or stock breeding and lastly not to employ labourers for work on the land except in special cases.

The maximum area of the land which each colonist or each family can occupy is not to exceed 73 hectares.

If these conditions are not fulfilled, the loan can be reduced 50 per cent, and the Bank can demand the special instalment of repayment required to affect this reduction.

The colonist will not be able, without the consent of the Mortgage Bank and of the Colonization Commission, to mortgage his holding nor to sell it, before the lapse of five years from the date of its assignment to him, unless the mortgage loan has been previously refunded.

If at the end of ten years from the date of contract the lands acquired have not been turned to account, or if they have been cultivated by agriculturists who are not the owners, the Treasury is to be paid in full all the annual charges which would have been payable in respect of the tax on real property. These annual charges are calculated on the basis of the payment due in the years when the repayment takes place, plus 25 %, which goes to the person who reports the state of affairs.

Only the State is to have the power of expropriating lands in order to allot them to agriculturists.

In the selection of land for expropriation, preference will be given to the estates which are not directly managed by their owners or are not used for agriculture, or to lands exceeding 500 hectares in extent.

In the allotment of lands by the Colonization Commission preference will be given first to Uruguayan agriculturists who are of full age and are heads of families, and then to foreign agriculturists who produce proof that they have experience in agriculture and have children in Uruguay. In every case the morality, capacity for work and health of persons applying for land will all be taken into account, and allotment will be made according to the capability, means, capital and equipment which each has at his command.

If several interested persons of identical status apply for the same piece of land, it will be assigned by casting lots. The same procedure will be adopted in cases where any doubt could arise as to the persons to whom the particular holding should be allotted. If the applicant is an agricultural engineer, the Colonization Commission is empowered to assign him two holdings provided they are employed for intensive agriculture.

The Colonization Commission has the special duty of seeing that the conditions of this Law are observed by the debtors, and it has power to enforce the punctual payment of the interest and instalments of repayment on mortgage loans.

During the five first years counting from the date of registration of each holding the aforesaid Commission will advance from its funds the arrears of interest and of repayment instalments, but will have the right to have these sums reimbursed. For this purpose the Commission is to place permanently at the disposal of the Mortgage Bank funds equivalent to 20 % of the annual charges on the Mortgage bonds issued by the Bank for colonization loans. In operations effected through private enterprises, the Mortgage Bank can demand appropriate guarantees up to 15 % of the

price of each holding, to be given either in cash, in Public Debt securities or in mortgage bonds. With this capital, a special guarantee fund is constituted to provide for the punctual payment of the annuity charges in respect of the mortgage loans during the five year period mentioned above.

The Mortgage Bank is not to take any commission for the loans thus concluded.

The expenses of expert visits to the holdings which serve as security for the loans, and fees paid to the notary in operations effected through the Colonisation Commission, will not be placed to the charge of the borrowers.

The Government is authorized to grant to the Colonization Commission out of the public funds, a sum not exceeding 50,000 pesos, so as to enable it to furnish, subject to repayment of the cost, indispensable equipment to agriculturists who have not enough capital to meet first cost of installation.

Funds can be similarly advanced to agriculturists who need cash at the start so as to prepare for cultivation the holdings allotted to them.

Part IV : Miscellaneous Questions relating to Agricultural Economy

I. — ECONOMIC AND SOCIAL CONDITIONS OF THE AGRICULTURAL CLASSES

MISCELLANEOUS INFORMATION RELATING TO THE ECONOMIC AND SOCIAL CONDITIONS OF THE AGRICULTURAL CLASSES

INTERNATIONAL QUESTIONS.

THE 3rd INTERNATIONAL DOMESTIC ECONOMY CONGRESS. — From a communication received from the International Federation for the Promotion of the Teaching of Domestic Economy.

The International Federation for the Promotion of the Teaching of Domestic Economy, formed in 1908 at Fribourg (Switzerland) has decided to hold a 3rd International Congress for the Teaching of Domestic Economy Paris from 18 to 21 April 1922, with an exhibition of furniture, utensils, and methods of teaching.

The two previous Congresses were held at Fribourg (1908) and at Ghent (1913).

The principal object of the forthcoming Congress will be an enquiry into the teaching of domestic economy during the war and during the period of general reconstruction. With regard to the teaching of rural domestic economy an effort will be made to define exactly what arrangements ought to be made for the teaching of domestic economy in the primary rural schools, as well as in the secondary country schools.

The teaching of domestic economy in institutions for general instruction ought not in any way to hinder the establishment of rural schools of domestic economy, and the special task of the Congress will be to seek out ways and means of making the teaching in such schools really efficient. The training of mistresses and the inspection of the teaching will also have a place in the programme of the Congress.

AUSTRIA.

THE PROVINCIAL LAW OF 22 MARCH 1921 ON AGRICULTURAL LABOUR IN LOWER AUSTRIA. — *Ämtliche Nachrichten des Österreich. Bundesministeriums für soziale Verwaltung*, No. 18-19. Vienna, 1 October 1921

The Law of 22 March 1921 concerning the regulation of agricultural labour (*Gesetz vom 22. März 1921 über die Landarbeiterordnung*) passed by the Provincial Diet of Lower Austria, lays down the rights and duties of agricultural labourers and of their employers.

By agricultural labourers (male and female), in the terms of this Law, of which we propose to indicate the principal provisions, is understood persons who are engaged, under a hiring agreement, for a period of not less than six consecutive days, to perform, in return for remuneration, the ordinary work required in farming or forestry (§ 2.). The hiring agreement between the employer and the worker is concluded verbally. Collective agreements made between workers' associations and one or more employers must be reduced to writing to ensure validity. The customary arrangement, whereby a payment on account is made as soon as the agreement is concluded, is retained; this is reckoned as part of the wage. The employer of manual labour must hand to the worker, on demand, immediately on the taking up of work, a written list of the principal rights and duties arising out of the hiring agreement (§ 4). The worker must carry out the work which he is bound to do by the agreement and by local custom, with diligence, care and conscientiousness, and must execute the orders of his employer or of his representative in all that has to do with the special part which falls to him in the undertaking. These orders must in no case run counter to liberty of conscience nor interfere with the civil rights of the worker. The employer must treat the worker conformably with the provisions laid down in the agreement, must observe the ordinary rules of good manners and propriety in dealing with him and must further protect him, as far as possible, against risks incurred in the pursuit of his occupation (§ 14). The working hours correspond to the hours of daylight and amount, on an average, throughout the year, to ten hours of actual work a day. The workers in charge of animals, or who are employed in the regular routine of domestic arrangements, must work even longer hours without being entitled to payment for overtime. As against a supplementary payment to which he may be entitled, the worker cannot refuse to perform certain kinds of work which, in accordance with local custom, are carried on at certain seasons beyond the usual hours of work. These are kinds of work of which the non-performance may seriously affect the yield, such for instance as the gathering in of field crops (§ 21). Wages in cash must be paid in accordance with the understanding arrived at between the two parties. In the absence of special agreements in this respect, daily, weekly or monthly wages must always be paid for the length of time during which the labourer has actually worked (§ 15). When it is agreed that allowances in

kind are to be made, the goods so reckoned must be of standard quality when delivered and must be weighed or measured according to the metric system. If it is agreed that the allowances are to take the form of meals, they must be wholesome, good and sufficient in quantity. Regular serving-out of spirits is forbidden (§ 19). The accommodation allotted to workers must be in accordance with the requirements of hygiene and of morals, as well as with police regulations against risk of fire. Where several workers are lodged together care must be taken to separate the sexes (§ 20). Agricultural labourers who have been employed on the same farm for more than a year without a break are entitled to leave of not more than eight days during a slack period (§ 22). If a labourer has remained continuously on the same farm, a premium must be paid to him from time to time at fixed periods. These are calculated as a percentage of the average cash wages paid to him during the preceding ten years, as follows: at the end of the tenth year, 30 per cent.; at the end of the 15th year, 40 per cent.; after 30 years 80 per cent.; after 35 years, 90 per cent.; and finally at the end of the 40th year, 100 per cent. (§ 18). The hiring agreement may be cancelled, according to the reasons given, either without notice or at a fortnight's notice, either by the employer or by the worker. The agreement may be cancelled without notice for the following amongst other reasons: acts of violence, serious insults, presumed immorality either on the part of the employer or of the worker. Reasons for cancelling the agreement on a fortnight's notice are: (a) on the part of employer; disputes between workers, making peaceful work together impossible, drunkenness, ill-treatment of animals, etc.; (b) on the part of the worker, acts of violence, continued abuse, exaction of work detrimental to health, constant unpunctuality in payment of wages, etc. (§§ 7 to 13). If the labourer finds himself unable to do his work properly owing to illness or as the result of an accident, provided the disability cannot be ascribed to his own fault, he is entitled to his whole wages and to medical attendance for six weeks or even for ten weeks in case of prolonged treatment, or to hospital treatment for four weeks. If it is proved that the illness was traceable to any fault of the employer the period of treatment at the latter's expense may be prolonged to four months (§ 35). Married women with the care of a house must be allowed enough time to give to housekeeping duties. Expectant mothers are not to be employed in work which would clearly be dangerous to them in their condition, and after confinement women are not to do any kind of work for four weeks, and during the two following weeks only with the consent of the doctor (§ 20). Land workers have always the right to combine for the defence of their interests and any hindrance to their freedom of combination is forbidden (§ 29). In the event of disputes arising out of the relations regulated by this Law, the ordinary courts have jurisdiction. In suits brought against the employer of labour, the court of the district in which the work is being carried on at the time of the summons has also jurisdiction.

FRANCE.

A NEW INSTITUTION DEALING WITH ALLOWANCES FOR FAMILY CHARGES
IN AGRICULTURE — *La Main-d'œuvre agricole*. Paris, June 1921.

In addition to the institutions which we have already mentioned dealing with allowances for family charges in agriculture (1) we must not omit to note the *Caisse Tourangelles de compensation pour allocations aux familles ouvrières* (4 bis, rue Jules Favre, Tours), recently founded by the occupying landowners and tenant farmers of Indre-et-Loire.

The object is to make half-yearly allowances to families of agricultural labourers working in the country and for agriculture and having at least three children living (legitimate or acknowledged) by means of a common Fund maintained by subscriptions paid by occupying owners or tenant farmers in proportion to the extent of land cultivated by them.

To obtain the benefit of the allowances, male or female agricultural labourers must:

1. have been exclusively in the service of one active member for six consecutive months;
2. have actually under their care children entitled to the benefit, that is, under 14 years of age;
3. have at least three living children legitimate or acknowledged, it being understood that those who have died for their country are considered as living, but that those shall be considered as non-existent who follow any occupation which is not agriculture or one of the following occupations carried on in the country: harnessmaker, wheelwright, smith, repairer of agricultural implements or cooper (2).

Times of payment, etc., and other conditions date from the declarations to be made each year on 31 May and 30 November.

The amount of allowance is found by dividing the total number of the subscriptions paid by employers to the Fund during the preceding half-year by the number of children to be benefited: the allowances are remitted to the farmers, who send them to the mothers, or in default of these, to the fathers or to their representatives.

Changes (births or deaths, arrivals, departures, increase or diminution of the extent of land, or woods) occurring between the employer's declaration and the payment of the allowances do not take effect until the next half year.

All the occupying owners and tenant farmers approved by the Bureau,

(1) See our issues of January-February 1921, page 56, and of April 1921, page 222.

(2) Thus a household having one child of seven and one of thirteen years of age, and a son of twenty-three is entitled to two benefits; if the eldest son has died for his country it is the same. On the other hand the mother has no allowance should one of her three (or two) children give up agriculture.

in Indre-et-Loire (1) are active members. Honorary members are those who desire to aid the work, also on condition of their being approved by the Bureau.

The active members pay a subscription of 2 francs per annum per hectare of land, vineyards, and meadows, and 16 centimes per hectare of woodland, the minimum being 50 francs per half-year. This subscription is payable half at the end of June and half at the end of December of each year, according to answers given by the subscribers to a series of questions sent to each. There is also an entrance fee, equal to half the first half-yearly subscription, to meet the cost of establishment (printing, registers, etc.) and to form a reserve fund.

Honorary members pay 50 francs at the time of their registration, and at the end of May every year; those who pay 100 francs per annum are called benefactors, and those who make a single payment of not less than 500 francs are donors. It is the same with affiliated societies or associations.

The funds supplied by honorary members, and subsidies of every kind, as well as the entrance fees, are capitalized separately. They are utilized to pay the cost of establishment or management, or to furnish supplementary allowances to families most deserving of assistance, or to assist or set on foot any scheme for the benefit of peasant families.

A reserve of at least 10 per cent. is to be formed.

If necessary the cost of management may be defrayed out of the payments made by active members.

GERMANY.

SYSTEMS OF REMUNERATION FOR AGRICULTURAL LABOUR — SCHMITT (Julius) in *Die wissenschaftliche sozialistische Agrar-Korrespondenz*, No 15 Berlin, 4 November 1921.

Up to March 1921, about 774 collective agreements regarding the wages of agricultural labour had been registered at the State Ministry of Labour, applying to all parts of Germany. The remuneration of agricultural labourers is effected practically by three methods: by a composite system of wages, by a movable wage-scale, and by profit-sharing. This last method has been applied, as far as German agriculture is concerned, as an experiment, for the last thirteen years on the Tonnin estate (*Ruttergut*) in Pomerania. Besides a fixed wage in cash and kind, the agricultural labourers receive, under a profit-sharing agreement, 4 per thousand (·04 %) on cereals, and 2 per thousand (·02 %) on potatoes grown on the land. The owner has obtained good results from this system. It is not known if similar experiments have been tried elsewhere.

The system of remuneration chiefly in vogue at the present time in Northern, Eastern and Central Germany, is the composite system, that is,

(1) The Bureau reserves the power of extending the area of operations of the society.

a wage paid partly in cash and partly in kind, and one in which, at least in the North and East, the value of the allowances in kind surpasses what is paid in cash. This system has the advantage of securing to the employer his hold on manual labour; on the other hand, it guarantees to the labourers produce possessing food value in sufficient quantity and independent of the fluctuations of the market price. In Southern Germany, in Bavaria, Wurtemberg and in Baden, the allowances in kind are a factor of very small importance and that because the conditions of land tenure are different. The agricultural labourer who does not possess land himself is practically non-existent. Agricultural work is nearly everywhere carried on by day-labourers who hold land as property or at least on lease and for whom in consequence allowances in kind have no interest.

It is quite impossible to make a comparison between the wages of agricultural labourers in different parts of Germany, for the purchasing power of money is entirely different in the various districts, and besides a large number of agreements give no particulars as to allowances in kind, except to indicate the value of allowances.

In the movable scale system, wages are modified in accordance with retail prices, at least during the period of the validity of the agreement. Thus, for example in Hanover, an increase of 5 marks in the price of barley carries with it an automatic increase of 3 to 5 pfennige per hour for wages in cash. In Schleswig-Holstein, another procedure is followed: a wages commission holds periodic sittings, and at those sittings such modifications as would seem to be necessary are made in the wages.

II. — LAND SYSTEMS

AUSTRALIA.

THE REPATRIATION OF AUSTRALIAN SOLDIERS.

(Conclusion).

§ 3. SOLDIER SETTLEMENT IN NEW SOUTH WALES.

The Acts dealing with the repatriation of soldiers are the Returned Soldiers' Settlement Acts 1916 and 1917, and the Voluntary Workers' (Soldiers' Holdings) Act 1917. Acts under which land is made available for discharged soldiers are the Closer Settlement Acts 1904 to 1916, Murrumbidgee Irrigation Act 1910, and the Crown Lands Consolidation Act 1913. The administration of these Acts is in the hands of the Minister for Lands.

Land is made available under one or other of the following tenures: (1) Homestead Farm, (2) Crown Lease; (3) Returned Soldier's Special Holding; (4) Suburban Holdings; (5) Group Purchase. In addition, a discharged soldier may obtain land under the provisions of the Closer Settlement Acts which have been amended to allow one or more discharged soldiers to apply for land to be brought under the Acts.

(1) The conditions appertaining to the homestead farm tenure are:— *Tenure*, lease in perpetuity. *Residence*, five years, to be commenced within 6 months after confirmation. *Annual rent*, 2 ½ % on the notified capital value, payable half-yearly in advance. Reappraisal of the capital value is made at the end of 25 years and every 20 years after. The holder can apply for appraisal within 5 years after confirmation. *Improvement in lieu of rent*, rent need not be paid for first 5 years, if an amount is spent in each year equal to the annual rent, upon permanent fixed and substantial improvements, the same, except boundary fencing, being in addition to the improvements required by the conditions of the lease.

(2) In a Crown lease: *Tenure* is a lease for 45 years; *Residence* conditions are the same as Homestead Farm; *Annual rent* is 1 ¼ % on the notified capital value, payable yearly in advance. Minimum rental is £1 per annum. Reappraisal of capital value is made at the end of 15 and of 30 years from the commencement. The holder can apply for appraisal within 5 years after confirmation. *Improvement in lieu of rent*, rent for the first year will be remitted if the lessee expends a sum equal to the rent for that year in improvements, the same, except boundary fencing, being in addition to the improvements required by the conditions of the lease.

(3) Under a returned soldier's special holding tenure, land may be set apart either by way of sale or lease, under such conditions as may be determined. If by way of lease, the conditions will in general be similar to those of homestead farms. Application can be made to purchase the land, subject to recommendation of the Land Board and approval by the Minister. The capital value will be appraised, and it must be paid in fifteen equal annual instalments with 2 ½ % interest added. If set apart by way of sale, the conditions will be notified, and in most instances will be very similar to those of group purchases.

(4) Suburban holdings, which can also be converted into freehold, have as conditions of *tenure*, lease in perpetuity; *residence*, 5 years, to be commenced within six months after confirmation; *annual rent*, 2 ½ % on the notified capital value, payable half-yearly in advance. Reappraisal is made at the end of every 20 years. The holder can apply for appraisal within 5 years after confirmation.

(5) Group purchase tenures are mainly on estates purchased by the Crown. Each estate will be subdivided into home-maintenance areas. Farms for orchards, poultry, wheat, pigs, dairying, vine-yards, and mixed farming will be made available from time to time. (Grazing areas of Crown lands will be made available by notification in the Government

Gazette under homestead farm or Crown lease tenure). A careful selection will be made from the applications received, and blocks will be allotted only to those who appear to have a reasonable prospect of success. The Minister retains the right, up to the time of confirmation, to remove from the settlement any person considered to be unsatisfactory, and any person so removed is not entitled to any compensation whatsoever.

As regards *tenure*, a freehold title will be given after all conditions have been fulfilled, and payment made of all moneys due to the Crown; *residence*, five years, less the period of any residence performed before the date of confirmation; *purchase money*, usually the instalment is 6 % of the notified capital value, and of this instalment 5 % on the outstanding balance is taken as interest. First payment is due twelve months after confirmation. The terms of payment extend over 38 years. Power is given to suspend payment of the first two instalments, and also the third instalment provided improvements to the value of the instalments have been effected by the holder in addition to improvements effected out of moneys advanced by the Crown; *fencing*, boundaries to be fenced with an approved fence within 3 years of confirmation, but even so, no advance will be made for the purchase of stock until the holding is considered to be sufficiently fenced.

The Closer Settlement Acts provide for one or more qualified discharged soldiers purchasing privately owned land upon terms approved by the Minister for Lands. This approval having been obtained, the intending settler is required to pay the first instalment of the purchase money, either 6 or 6 ½ per cent of the purchase price, the balance being provided by the Government and repaid (capital and interest) by annual instalments. The land is occupied as a "Settlement Purchase," the conditions attaching to which are that the purchaser shall perform 5 years' residence thereon, commencing within twelve months of the purchase; improvements equal in value to 10 % of the capital value must be effected within 2 years, and an additional 15 % within 5 years from the commencement of the purchase; improvements on the land at the date of selection will be credited when calculating the foregoing percentages.

The provisions apply only to the land and permanent improvements on it. If it is desired to purchase any stock, tools or implements already on the holding, it can be done only out of the money available for financial assistance.

The maximum value for land and improvements is \$2,500, but in special cases this may be increased to \$3,000.

Share-farming and the leasing of private lands are other means of increasing settlement, and the provision of financial assistance may be extended to those men who desire to settle in special localities. The conditions must be equitable to the settler, and must be submitted to the Department for approval before any financial assistance will be granted.

Large areas of land have been reserved on the Government irrigation areas, and camps have been established for the accommodation of selected applicants, who are granted farms after 3 months satisfactory service.

While in camp the men are employed upon development work in connection with their blocks, and are paid wages at award rates. Upon taking up residence on their farms, these settlers may obtain the usual £625 for the development of their blocks, and subsequently such additional amounts as may be necessary to bring their land to the stage of productiveness. Payments for rent, etc., and repayments of advances will be suspended for 5 years in the case of fruit farms, and for 2 years in the case of dairy farms. The total indebtedness, including interest, will then be payable by instalments extending over a period of 20 years. Areas are made available also from time to time in the Western Division for soldier settlement.

Soldiers travelling to inspect land will be carried free on one return journey only, second-class tickets being issued on presentation at the booking office of the approved certificate from the Department of Lands. Successful applicants for land, with their families and such belongings (including live stock) as were in their possession immediately prior to taking up the land — the live stock not to be more than sufficient for the land acquired — will be carried at half the ordinary fares and rates when journeying by rail to take up their residence on such land. The concession will be subject to the production of a certificate from the Department of Lands, and will not be allowed unless travel is made within 6 months after the holding has been granted.

The terms of repayment of advances are usually as follows: House, water supply, fencing, and other permanent improvements, by payments extended over 25 years (during the first 5 years the interest only is to be paid), Tools, stock, and implements, by payments extended over 6 years (interest only is to be paid at the end of first year). Seeds, plants, trees, etc., usually in one year.

Interest on advances is fixed by the Act as "not exceeding $3\frac{1}{2}$ % for the first year, 4 % for the second year, and so on, the rate increasing by not more than $\frac{1}{2}$ % for each subsequent year until the rate determined by the Minister (in accordance with the Act) has been reached." The maximum rate has been fixed at $5\frac{1}{2}$ %.

On group settlements only, where the advance of £625 is not sufficient to stock the land after making necessary improvements and providing implements etc., sheep, cattle, or dairy stock may be allotted on shares to a limited extent at the following rates: *Sheep*. — From the yearly profit the Minister will deduct, (a) 6 % of the said profits, (b) Interest at the rate of 6 % per annum on the value of the animals supplied by him during the year, and on all sums of money expended by him on, or in connection with the share scheme, (c) 4 % of the net profits for costs of supervizing working and control, (d) The sum of 3s. per sheep, which is the estimated depreciation. The settler will be entitled, at the yearly adjustment of accounts, to the balance of the net profits, and to all the lambs. *Cattle*. — From the yearly profits the Minister will deduct moneys at the same rates as for sheep, except that the sum of £1 10s. per head of cattle per annum, which is the estimated depreciation, will be deducted.

At the yearly adjustment of accounts, the settler will be entitled to the balance of the net profits (about 75 %), and to all calves. For dairy cattle the settler will pay £1 10s. per cow per year and will be entitled to half the calves.

Owing to the growing scarcity of suitable Crown lands, and the high cost of resumed lands, it has been decided to develop greatly the more intensive forms of agriculture on the group settlements. This policy will save great expenditure, and will enable the men to be supervised and instructed, it is also hoped that group settlement will offer improved conditions of home and social life. Suitable industries have been selected for farming, the most careful consideration being given to the many factors that might influence the success of the scheme, such as the initial outlay and maintenance costs, the use and development of existing markets, etc. Up to the present the following industries have been decided upon: hog-raising, prune-growing, tropical fruit-growing (principally bananas and pineapples), poultry-farming, viticulture, and market gardening. Other industries are being investigated.

In accordance with the decision to develop hog-raising as a separate industry — an entirely new departure in Australia — an endeavour is being made to obtain sufficient land in suitable districts such as Gundagi, Canowindra and in the Hunter River valley to establish settlements of 40 to 50 farms each. The area of the farms will probably be from 50 to 100 acres in extent according to the quality of the land; this area should be sufficient to maintain about 30 breeding sows, from which a comfortable living may be obtained. A start will be made with about 8 to 10 breeding sows, and the full complement should be reached in a couple of years, at which time also the blocks will be confirmed. The scheme provides for the erection of a bacon factory in each group of settlements, or one large factory capable of serving a number of settlements, so that the pigs may be treated and cured under the best and most economical conditions.

Suitable land for prune growing has been and is being purchased in the Young and Albury districts. Each settlement will comprise about 50 farms each of from 30 to 40 acres in area. About 10 acres per farm will be planted with prunes. Owing to the long period which must elapse before the trees reach bearing age, maintenance allowance will be available for 6 years if considered necessary; at the end of this time the blocks will be confirmed. It is intended to install, as far as may be practicable, an up-to-date plant and evaporator on each settlement. This will enable the entire produce of the settlement to be cured, graded and packed in the most economical and effective manner, and a standardized product placed on the market.

With regard to banana and pineapple growing it is intended to provide each settler with about 20 acres of land, of which 5 acres will be planted to bananas or pineapples. The blocks will be confirmed after about 12 months.

A number of general orchard blocks are being made available at Kent-

ucky and elsewhere; the conditions governing these are similar to those for prune orchards.

Poultry farming shows very good prospects of success. Maintenance will be available for 2 years, at which time the full complement of 600 laying hens should be reached; at the end of this time the block will be confirmed.

Viticultural group settlements are being established in the Hunter Valley, as this district is free from the phylloxera pest. The land will be cut into blocks of about 30 acres, of which 15 to 20 acres will be planted to vines. Maintenance will be available up to 3 years, when the blocks will be confirmed.

Suitable land for market gardening is being made available in various parts of the State, such as Batlow, Bathurst and in the county of Cumberland. The blocks will vary in size according to their location and quality, being about 20 acres in Bathurst, and 5 acres and upwards in the county of Cumberland.

Blocks will be provisionally allotted to prospective settlers on the definite understanding that reasonable proficiency must be attained within 3 months, and that those failing to comply with this requirement will be recalled. Maintenance may be made available for 12 months; at the end of this time the blocks will probably be confirmed.

The Government Saving Bank of New South Wales makes advances on the security of most of the forms of tenure, the maximum loan being £2,000, and the minimum £50 (under the Bank Act); at present however, applications for loans in excess of £750 are not being considered. The amount that will be advanced on freehold or certified conditional purchases and associated conditional lease land will not exceed $\frac{2}{3}$ of the Bank's value of the security, whilst on the other tenures it will not exceed $\frac{1}{2}$ of the Bank's value of the improvements, or $\frac{2}{3}$ of the sale value of the security. The present rate of interest is $5\frac{1}{2}\%$, charged to the borrower from the date that the advance is made. Repayment may be by half-yearly instalments, including principal and interest, within a period of 31 years, or less if the security embraces Crown leasehold land having a currency of less than 31 years.

Loans on the security of freehold or certified conditional purchases may be repaid as above or at the expiration of a fixed term not exceeding $5\frac{1}{2}$ years, during which time interest only is payable half-yearly. All moneys due to the Crown, Pastures Protection Boards, Municipal or Shire Councils, or the Federal Land Tax Commissioner, or for privately effected improvements, will be deducted from advances made.

A borrower may repay the whole of his loan on any date that an instalment or interest-payment falls due, or he may on any such date pay £5 or any multiple of £5 in excess of the usual instalment or interest-payment, and any amount so repaid will be placed to a special account carrying interest at the same rate as the mortgage.

With the Bank's application form and a map showing clearly the land

offered as security the necessary valuation fee must be sent, as follows — Where the holding offered as security is situated within 5 miles of a railway station or shipping port in New South Wales, £2 10s.; over 5 and up to 10 miles, £3; over 10 and up to 20 miles, £4; over 20 miles, £5. In the event of a subsequent application in respect of the same security being lodged by the same applicant, half of the above valuation fees only will be charged, provided that the security is subject to a loan from the Bank at the date of valuation.

It is intended to establish a general store in each settlement, the buying of supplies being in the hands of the Returned Soldiers Settlement Branch. A number of these stores is in operation, and during the year ended 30 June 1920, the number of settlements supplied was 52, and the number of stores 11.

Marketing is now being done on a co-operative basis, and as the settlements reach the productive stage they are brought under the scheme.

In Table IV is shown the area of Crown Lands, exclusive of group settlements made available prior to 30 June 1919 and for the year 30 June 1919 to 1920. Table V shows the number of settlers in actual occupation on 30 June 1920.

TABLE II. — *Particulars of Crown Lands in the State of New South Wales made Available prior to 30 June 1919, and for year 30 June 1919-1920.*

Tenures	Area	
	Prior to 30 June 1919	Year 30 June 1919-1920
Crown Leases	439,018	171,011
Homestead Farms.	625,649	1,010,671
Special Holdings.	42,111	10,621
Suburban Holdings	50	2
Original Conditional Purchases	100	159
Original Conditional Purchases and Conditional Leases in virtue thereof.	345	120
Settlement Purchases	10,416	8,221
Irrigation Farms	10,285	12,999
Additional Holdings	27,507	19,007
Total	1,156,311	1,234,241

Any soldier who held land before he enlisted, or was already settled on the land before the Returned Soldiers' Settlement Acts came into force, and avails himself of the Acts is deemed to have complied with the residence conditions for the length of period that he was abroad.

TABLE V. — *Number of Soldier Settlers in Actual Occupation in the State of New South Wales on 30 June 1920.*

How provided for	Number
On Group Settlements	1,155
Approved to settle on Settlements	175
On Private Land	159
On Crown Lands — confirmed less forfeitures	973
On Crown Lands — outstanding	229
Closer Settlement Promotion Act (completed and paid for)	620
Closer Settlement Promotion Act (approved but not completed)	915
On Murrumbidgee Irrigation Area	321
Approved to settle on Murrumbidgee Irrigation Area	
In Western Division	-
Total	4,913

With regard to Voluntary Workers' Associations the Governor may issue Crown Grants to the Public Trustee of Land. The Public Trustee may then acquire, hold, subdivide, alienate, and mortgage land, he may borrow money and make advances to Voluntary Workers' Associations for the purchase of materials. A completed building, conveyed to a discharged soldier or dependants by a Voluntary Workers Association, will be subject to mortgage to secure payment for materials.

In the case of houses which are the property of a soldier or dependants, these are exempt from seizure in the case of insolvency or bankruptcy, or from being distrained upon.

In order to facilitate the growth and prosperity of the soldier settlements, the State Government is undertaking a great amount of direct and indirect land improvement, such as drains, roads, railways, etc. and upon these works a certain number of ex-service men is being employed.

§ 4. SOLDIER SETTLEMENT IN VICTORIA.

The Acts dealing with the repatriation of soldiers are the Discharged Soldiers' Settlement Acts 1917 and 1918. Acts under which land is made available for discharged soldiers are the Closer Settlements Act 1915 and the Land Act 1915. The administration of these Acts is in the hands of the President of the Board of Land and Works.

With regard to the settlement of discharged soldiers on Crown lands, the Governor in Council may set apart any area of such land for disposal;

this land may be subdivided into blocks as the Governor thinks fit. Qualification certificates are issued by a Qualification Committee. The residence condition is not enforced.

Private lands may be acquired by the Board under the Closer Settlement Act, either by agreement or compulsorily. Land cannot be acquired compulsorily from an owner who is on active service abroad. For settlement purposes the Victorian Government may borrow £2,250,000 during 3 years from the commencement of the Closer Settlement Act. The Board may improve the land within 3 years after disposal under conditional purchase leases or prior to being resold after forfeiture.

The security demanded for advances made to discharged soldiers is as follows:— (a) lien on improvements to an amount not exceeding 100 % of unencumbered value thereof; (b) stock mortgage; (c) hire purchase agreement; (d) any security in the Closer Settlement Act with respect to advances; (e) all or some of the above securities.

A holding may only be transferred in accordance with the Closer Settlement or Land Acts, except in cases necessitated by sickness or other adverse circumstances.

If a discharged soldier has been settled by a private person or body of persons the usual benefits may still be extended to him.

Up to 30 November 1919 the number of certificates applied for to the Qualification Committee was 12,066 and the number granted 7,842, or 65 %. The preference displayed in the applications granted was as follows:— Mixed farming 5,126 (65.5 %), dairy farming 665 (8.5 %), irrigation 743 (9.5 %), wheat growing 320 (4.1 %), poultry raising 75 (.9 %), orchard 269 (3.4 %), grazing 210 (2.7 %), share farming 62 (.8 %), market gardening, nursery 139 (1.7 %), other types, 230 (2.9 %). It had been estimated that the number of settlers in Victoria would be 5,395 but by 30 November 1919, the number was already in excess (7,842) and there were still 1,279 applicants waiting to be called before the Committee.

§ 5. SOLDIER SETTLEMENT IN QUEENSLAND.

The Act dealing with the repatriation of soldiers is the Discharged Soldiers' Settlement Act 1917. Acts under which land is made available for discharged soldiers are the Land Acts 1910 to 1916. The administration of these Acts is in the charge of the Secretary for Public Lands.

Crown lands may be set apart by the Minister to be open for selection as perpetual lease selections, also as perpetual town and suburban leases. It is not necessary for the discharged soldier to deposit any rent or instalment of the survey fee. No rent is demanded for the first 3 years, then from the fourth to fifteenth year it is 1 ½ % of the capital value. After 8 years the survey fee is to be paid in 10 annual instalments. After 5 years the lessee is allowed to transfer his land to another discharged soldier, and after 10 years he may mortgage, transfer or sublet his land. Town and suburban leases are not offered at auction. Private land may be acquired in

the usual way; payment may be made in 4 $\frac{1}{2}$ % debentures not negotiable for 5 years.

The security for advances is a mortgage in favour of the Queensland Government Savings Bank (now taken over by the Commonwealth Bank of Australia). The interest rates on advances are the same as for New South Wales, but may not exceed 5 %.

Leases are subject to the personal residence of the lessee during the whole term. The other lease regulations are the same as in Victoria. Applicants for land who are still serving abroad need not take up residence on their land until 6 months after their return, and rent and instalment of the survey fee need not be paid.

§ 6. SOLDIER SETTLEMENT IN SOUTH AUSTRALIA.

The Acts dealing with the repatriation of soldiers are the Discharged Soldiers' Settlement Acts 1917, 1918 and 1919. Acts under which land is made available for discharged soldiers are the Irrigation and Reclaimed Lands Act 1914 and the Crown Lands Act 1915. The administration of these Acts is in the hands of the Minister of Repatriation.

The Governor may set apart areas of Crown land for allotment if recommended by the Land Board, and approved by the Inspector of Lands in the Department of Agriculture.

The number of men applying for training was altogether in excess of the accommodation or possibilities of the training farms, and a system of training these discharged soldiers with farmers and fruitgrowers was put into operation, with such success that it has proved equal to all requirements and the Board have decided to close the training schools. The trainee is paid 30s. per week by the Government as a training allowance, and is provided with board and lodging by the trainer.

Supervision of inexperienced settlers is the greatest factor towards successful settlement and further inspectors and increased facilities for visiting the new settlers, who are widely scattered throughout the State of South Australia, is necessary.

Up to 30 June 1920, 1,273 soldiers had been settled, of these 752 are occupied in wheat growing, sheep farming and grazing; 131 in dairying etc.; 373 in fruit, viticulture and market gardening; and 17 miscellaneous, including pig-raising, share-farming, and bee-keeping. In addition there were 5,360 men registered for land; 2,641 approved for assistance; and 778 men in training or approved for training.

§ 7. SOLDIER SETTLEMENT IN WESTERN AUSTRALIA.

The Act dealing with the repatriation of soldiers is the Land Act Amendment Act 1917. Acts under which land is made available for discharged soldiers are the Land Acts 1898 to 1917. The administration of these Acts is in the charge of the Minister for Lands.

The ordinary provision for soldier settlement on Crown land is that it

be declared open for such settlement by the Governor. Private land may be acquired, either by purchase, or in exchange for Crown land. The Government may effect improvements on the land before selection, and applicants may be required to acquire experience on a training farm or with some established farmer before being qualified. The security for advances is a mortgage in favour of the Agricultural Bank. The rate of interest on advances is $3\frac{1}{2}\%$ for the first year, increasing by $1\frac{1}{2}\%$ annually until the maximum fixed by agreement is reached. On any further advances the usual Agricultural Bank Act or Industries Act rates will be charged. After 5 years the advances under the Agricultural Bank Act will be repayable to that institution by instalments extending over 25 years with interest added. Advances under the Industries Assistance Act must be repaid with interest added as prescribed by the said Act.

Residence is compulsory for at least 6 months in each year for the first 5 years. No transfer can be effected without the approval of the Minister on the recommendation of the Land Qualification Board. Any settler who already holds land and has enlisted may obtain protection against forfeiture for non-compliance with conditions and for non-payment of rent, or if he held land under a conditional purchase lease he may have his land brought under these Regulations.

§ 8. SOLDIER SETTLEMENT IN TASMANIA.

The Acts dealing with the repatriation of soldiers are the Returned Soldiers' Settlement Acts 1916, 1917, 1918 and 1919. Acts under which land is made available for discharged soldiers are the Crown Lands Act 1911, and the Closer Settlement Act 1913. The administration of these Acts is in the charge of the Minister for Lands and Works, aided by a Closer Settlement Board consisting of not less than 4 nor more than 9 members; one-third of the members, at least, must be returned soldiers.

Applicants for land need not pay a deposit. No rent need be paid for the first year at least and no rates or taxes for 4 years. Qualified settlers may select up to 100 acres of first class rural land, or its equivalent in second or third class land. No price is to be paid by the settler but the residential conditions apply.

Money advanced to the settler remains a charge on the land and may be further secured by a hire purchase agreement. Repayments for stock and seed commence after the first year and then extend over 4 years in half-yearly instalments; implements are paid for after the first year and the period is extended over 10 years in half-yearly instalments. The period of non-payment for improvements is 3 years and payment extends over 18 years in half-yearly instalments. The interest charged is $3\frac{1}{2}\%$ for the first year, rising $\frac{1}{2}\%$ annually to the maximum, which is 5% .

Successful applicants for blocks in repurchased estates or for single farms are entitled to leases of the land allotted for a period of 99 years, with the right of purchase after 10 years, provided the conditions of the

lease have been complied with, at the valuation placed upon the lot at the time of leasing.

The capital value is fixed by the Minister on the recommendation of the Board, and the rental is based at a rate not exceeding 5 % on such valuation. Where there are any buildings on the land at the date of leasing, such buildings will be valued separately, and the lessee will be required to purchase them at such valuation, with interest at the rate of 5 % per annum by equal half-yearly instalments covering a period of 21 years. No rent or instalment on buildings will be payable in respect of any allotment held on lease for the first year, the first payments falling due 18 months from the commencement of the lease.

Up to June 1920 the State Government expended £1,627,287 on land purchase and had advanced £196,496 to settlers. The number of farms allotted total 1,336 and the grants of free selections on Crown lands were 177 in number.

CZECHOSLOVAKIA.

AGRARIAN REFORM

BY DR. J. J. LEE, M.A., F.R.S.

Before the war the countries which now form Czechoslovakia were well known for the striking contrasts which were found in their land systems, there being great estates on the one hand and a large number of small holdings on the other. This fact is clearly shown in Table I (page 692) and Table II (page 693), compiled respectively from the Austrian Official Census of 1886, and from the Hungarian Census of 1895.

We do not here propose to study the historical causes of this phenomenon. Suffice it to state that where large properties predominated, the people emigrated either to Vienna or Northern Bohemia, or to Saxony, Westphalia, the United States, etc.

Through this emigration the country was deprived of thousands of strong labourers every year, and the agrarian reform movement was chiefly directed to stopping this trouble where it was worst, viz., in Slovakia, Sub-Carpathian Russia and in Southern Bohemia.

§ I. GENERAL PRINCIPLES OF THE AGRARIAN REFORM MOVEMENT.

The first Law, dated 9 November 1918, declared null and void all transfers between living persons and also all charges and all mortgages, whether created by agreement or in execution of a will, affecting landed property

TABLE 1. — *Land Ownership in Bohemia, Moravia and Silesia at the end of 1896.*

Area in hectares	Bohemia					Moravia					Silesia				
	Number of properties	Percent- age	Absolute figures	Area	Percent- age	Number of properties		Area	Percent- age	Absolute figures	Number of properties		Area	Percent- age	Absolute figures
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Less than 1/2 ha.	171,473	42.0	50,439	1.0	208,295	49.6	18,232	2.2	25,198	35.0	3,501	0.7			
From 1/2 to 1 "	111,859	12.9	80,826	1.6	81,968	15.1	58,039	2.7	7,631	10.5	5,600	1.1			
" 1 " 2 "	109,201	12.6	155,821	3.1	60,856	11.2	55,658	3.9	10,548	11.5	15,291	3.0			
" 2 " 5 "	109,628	12.6	347,071	6.8	53,631	9.9	170,326	7.8	13,683	18.8	13,849	8.7			
" 5 " 10 "	63,011	7.3	454,724	8.9	33,928	6.3	243,239	11.1	6,623	9.1	40,821	9.3			
" 10 " 20 "	61,137	7.1	876,033	17.2	28,277	5.2	103,986	18.5	5,355	7.1	76,298	15.1			
" 20 " 50 "	36,200	4.2	1,019,492	20.0	12,685	2.3	352,702	16.1	3,060	4.2	81,910	16.9			
" 50 " 100 "	3,012	0.3	198,488	3.7	1,140	0.2	70,301	3.3	211	0.3	16,145	3.3			
" 100 " 200 "	906	0.1	123,161	2.1	339	0.1	15,777	1.8	67	0.1	9,380	2.0			
" 200 " 500 "	546	0.0	171,107	2.3	196	0.0	62,114	2.1	36	0.1	11,100	2.9			
" 500 " 1000 "	206	0.0	189,116	2.0	104	0.0	73,075	2.0	13	0.0	9,881	3.3			
" 1000 " 2000 "	182	0.0	259,608	3.0	79	0.0	112,379	2.9	18	0.0	26,861	7.9			
More than 2000 "	215	0.0	1,117,119	28.3	91	0.0	119,302	25.6	12	0.0	155,075	25.0			
Total . . .	868,102	100	5,074,101	100	542,282	100	2,181,225	100	72,791	100	505,980	100			

TABLE II — Number and Area of Agricultural Holdings (1) in Slovak and Russian Districts in 1895

Class	Slovak districts					Russian districts				
	Number of farms	Area in ardesial arpents (2)			Number of farms	Area in ardesial arpents				
		Total	Arable land	Including 1 forests		Total	Arable land	Including 1 forests		
I	2	3	4	5	6	7	8	9		
Less than 1 arpent { Without arable land	16,716	12,135	—	176	7,195	2,312	—	15		
	51,006	25,893	15,036	155	11,915	5,610	1,320	13		
From 1 to 5 arpents	110,587	369,034	206,300	7319	26,292	77,809	11,306	961		
» 5 » 10 »	97,136	699,786	404,103	1,1998	16,776	135,805	61,171	2,300		
» 10 » 20 »	75,013	1,051,061	732,625	38,622	15,534	217,515	91,156	5,086		
» 20 » 50 »	33,573	666,508	416,380	62,653	8,561	50,562	66,662	9,079		
» 50 » 100 »	5,299	356,573	211,591	17,116	1,126	91,111	35,306	6,536		
» 100 » 200 »	1,609	221,109	129,670	39,720	375	52,003	19,065	6,169		
» 200 » 500 »	1,416	461,395	279,910	99,092	207	62,339	22,190	13,069		
» 500 » 1000 »	790	556,960	260,333	172,616	61	59,025	17,803	19,516		
More than 1000 »	812	2,677,797	611,526	1,524,516	93	174,081	33,772	331,751		
Total	450,649	7,422,163	3,639,921	2,010,017	92,153	1,131,700	131,960	397,500		

(1) Holdings containing only pasture or forest land are not included
(2) One ardesial arpent = 575.665 ha. 1 ha = 17.77 ardesial arpents

which was entered in the "Public Books" (1), unless such transactions were carried out with the consent of the Minister of Agriculture.

This law prevented any further charges being placed on large landed estates or the sale of such estates, and set the fears of the public at rest, at least for the moment.

Early in the spring of 1919, a new reform law was introduced. The Law of 9 November 1918 was, in fact, only a precautionary measure. When it came to proceeding to the reform themselves, widely divergent opinions were expressed even on questions of great importance.

Notwithstanding these controversies, which at times became heated, the National Assembly on 17 April unanimously voted a law concerning the "seizure" of large landed estates. Another law concerning the rights of small tenant farmers to buy their land was voted shortly afterwards on 27 May 1919.

The law concerning the "seizure" of large landed estates is only a general law, which leaves many important questions to be dealt with in supplementary laws.

The broad idea of this law is explained in the first paragraph of it which is as follows:

"In order to bring about the reform of landed property, the State takes possession of all large landed estates situated in the Republic of Czechoslovakia including large entailed estates and establishes a Land Office." The second paragraph defines large landed property as follows: "This expression is taken to mean all contiguous lands, together with the rights attached to the possession of them, if the area lying within the territory of the Czechoslovak Republic belong to one person or to the same joint owners and exceeds 150 hectares of arable land (fields, meadows, gardens, vineyards, and hopgardens) or 250 hectares in all. Married couples who are not divorced are taken as being one person."

At first the word "seizure" was mistakenly translated in other countries by words meaning "confiscation" or "expropriation." Neither of these terms is correct. The idea of "seizure" is quite a new one in Czechoslovak law and resembles somewhat the dual ownership of old German law (*Obereigentum : Nutzungseigentum*). According to regulations subsequently made under the law, "seizure" means the restriction of the right of an owner to the free disposal of his land. He is not allowed, without authority from the Land Office, to alienate, lease, burden with charges or divide his property. Any transaction carried out in spite of the law, is not null and void, but is of no effect as far as the State is concerned. "Seizure" includes yet another limitation of property rights. The State can, under the terms of the law, take possession of "seized" property and distribute it amongst public or private enterprises. Compensation is given for property of which possession

(1) Public Book- (*zemeské desky, Landtafeln*) started in the 13th century. In these were originally entered acquisitions and the documents relating thereto as well as the sentences passed; it was only later that land rights were inscribed in them. But nowadays only the large estates are entered in these books, the remainder being entered in the Land Registers.

is thus taken, except in certain cases to be laid down in subsequent laws. So far only one such case has been laid down, namely "majorats" in the event of the family dying out in whose favour they were created. The compensation payable in respect of the property of the Hapsburg family will be paid to the Reparations Commission, according to Art. 208 of the Treaty of St. Germain-en-Lay.

But generally speaking compensation will be paid under the Law of 8 April 1920, of which we shall presently speak.

Property which is legally and economically independent of the property "seized" and which serves no purpose from a cultural point of view, such as urban buildings, country houses, etc., is exempt from "seizure," as also are lands belonging to the provinces, departments and communes.

The "seizure" not only affects large estates which were in existence at the time the law was passed, but will also affect estates which, in the future, come into the hands of a single owner or the same joint owners and exceed 150 hectares of arable land or 250 hectares in all.

Those who cultivate such "seized" estates (whether owners, tenants or persons having the usufruct of entailed estates) are obliged to cultivate them in a proper manner; the Land Office has the authority to compel them to do so, under a special law dated 12 February 1920.

The State has not the right to take over the whole of a "seized" estate, the owner has the right to ask that a part of the "seized" estate may be reserved for him. Such reserved part may, according to circumstances, be as much as 150 hectares of arable land or 250 hectares of other lands. It may even amount, in certain special cases, to 500 hectares.

The application of the agrarian reform laws is entrusted to a special authority, the State Land Office at Prague.

§ 2. DETERMINATION OF THE COMPENSATION TO BE PAID.

The basis for determining the compensation to be paid to owners for land seized is laid down in the Law of 8 April 1920. The basis taken is the average price of land of more than 100 hectares sold by private contract during the years 1913-1915. In order to fix the amounts to be paid in compensation as accurately as possible the Law instructed the Government to make a list of rates to be paid for the different kinds of land, taking into consideration the crops cultivated, the quality of the land and the locality. A decree concerning this matter was published on 21 January 1921. In this decree it was laid down that agricultural land, wooded lands and buildings were to be separately valued. The country is divided into different regions according to the crops cultivated (beet-roots, cereals, potatoes, forage crops) and the compensation payable is determined by multiplying the cadastral valuation by a coefficient, which is determined empirically and varies according to the distance of the land from the nearest station, etc. In dealing with forests, the kind of trees, the age of the forest and the number of trees per hectare are taken into consideration.

It may be added that the Law of 8 April 1920 stipulates that in the

case of estates of more than 1,000 hectares, a deduction is to be made from the compensation so fixed, rising progressively from 5 % (above 2,000 hectares) to 40 % (above 50,000 hectares).

In determining the compensation, account must be taken of the state of the property at the time when it is taken over. The law lays down that account must be taken of the amount of capital invested in the undertaking, in so far as its value is unexhausted. The Decree of 21 January 1921 put this principle in practice by allowing the compensation to be increased by as much as 30 per cent. in the case of well managed lands, 50 per cent. in the case of lands on which there are buildings and 70 per cent. in the case of buildings alone. In the case of badly managed property, the decree lays down that deductions on the same scale may be made from the compensation.

The owner, as well as persons whose rights of property in respect of the estates taken over are registered in the "Public Books," may appeal to the district tribunal for the revision of the compensation fixed.

A very difficult question is the form in which compensation is to be paid. The country being exhausted by the war, it was absolutely impossible to pay in cash, or in liquid capital, the price of the large estates. The issue of bonds has been proposed, but this method of payment has not been adopted on account of its probable effect on the public credit. The compensation due in respect of an estate, as soon as the amount is definitely fixed, is entered in a "Tribunal Compensation Book." There are four of these books, one for Bohemia, one for Moravia and Silesia, one for Slovakia and one for Sub-Carpathian Russia. These books are open to public inspection.

Public financial institutions, such as the land banks (large institutions established for Bohemia, Moravia and Silesia) and some communal savings banks are entrusted with the book-keeping and the making of payments in respect of the compensation and are given the name "Compensation Banks."

Owners' credits bear interest at 3 per cent. and are amortized at not less than $\frac{1}{2}$ per cent per annum.

The Bank may offer to pay the amount of the credit three months in advance, and may pay in cash or partly in the form of bonds repayable by amortization having the same value and bearing the same interest as the owner's credit. The owner cannot demand payment, but can freely transfer the credit.

Credits guaranteed by mortgage on property taken over are also, by analogy, entered in the compensation books; the repayment of certain of these credits cannot be demanded for five years from the time the transaction is entered in the compensation books. Credit furnished by institutions and funds which only lend against guarantees offering complete security can be called up on notice being given.

The law on expropriation, transmission and compensation takes special account of the interests of the worker on the estates. It has provided for the creation of a fund of 5,000,000 crowns in connection with the General Pensions Office, in order to assure these persons a pension and the enjoyment of the rights they have acquired.

§ 3 DIVISION OF THE LAND.

The law of "seizure" lays down the principles upon which transferred lands should be disposed of. It states that the State may retain them for public utility purposes, or may sell or lease them to small farmers, landless peasants, small manufacturers, soldiers disabled in the War, to ex-legionaries and their representatives, to associations of the persons mentioned above, consumers' associations and co-operative building societies, co-operative distributive societies, co-operative agricultural societies, to communes and public unions and to scientific and philanthropic institutions.

The Law of 30 January 1920 on the division of land contains all details concerning persons, areas, and methods which must be observed in distributing the land amongst the applicants. This Law aims at forming independent properties belonging to small farmers on the one hand and, on the other, at increasing the lands owned by small farmers to such an extent as to enable them to live a normal life; and, lastly, to facilitate the formation of co-operative societies. It goes without saying that land may be distributed for the benefit of institutions of public utility, such as schools, sanatoria, institutions for recreation, etc. The volunteers who, during the war, formed part of the Czechoslovak legions in Russia, France and Italy enjoy special advantages. On the other hand no land will be given to condemned criminals, who have lost their political rights, or to those who are considered abnormal.

The State proposes to retain in its own possession all the very extensive forests; the others will be divided amongst the communes, public corporations and, in exceptional circumstances, amongst private individuals. In every case the State will require a guarantee that the forests will be regularly worked.

In order that the division of the estates amongst small farmers shall present no difficulties to the cadastral survey, persons who acquire land must declare, for the purposes of the survey which the authorities propose to draw up, the land which they previously possessed. If the survey is not carried out when the division of the land is effected, those concerned will not be entitled to oppose any subsequent consolidation of the holdings.

In order to acquire and consolidate land which is subjected to the agrarian reform laws, "seized" land is allowed to be exchanged with land held by the peasants.

The Law on the distribution of land introduces into Czechoslovakia the principle of the "homestead" Lands which have been acquired under the Law cannot, in fact, be alienated or burdened with charges without the authority of the State Land Office.

The area of the "homestead" depends on the economic value of the region. The essential aim is to form economic holdings upon which the peasant and his family can gain a livelihood. It is calculated that the area of land necessary for this is from 6 to 15 hectares.

The question is raised as to the future of this institution in Czecho-

slovakia, where the people are accustomed to the idea of equal division of land amongst heirs and where the high standard of education amongst the population gives the best justification of land ownership. It is feared that the "homesteads" will inherit the same social faults which appertain to entailed estates

If the expropriation and division of large estates belonging to a single owner give rise to long delays, the owner of a large estate, which was "seized" in 1920 or 1921, may be compelled to let a certain part of it to those persons who have the right to apply for the land. Such a step must not, however, interfere with the regular cultivation of the estate. The leases are granted for periods not exceeding six years. This measure was put into force, in 1920, in order to accommodate immediately as large a number of persons as possible. In 1921 it will be used in Bohemia, Moravia and Silesia to help the ex-volunteers of the Czechoslovakian legions whilst in Slovakia and Sub-Carpathian Russia it is applied without distinction between the applicants, on account of the greater needs of the population.

§ 4. CREDIT FACILITIES FOR THE ACQUISITION AND CULTIVATION OF THE LAND.

To enable applicants who possess but little capital to buy the land, a special law dated 11 March 1920 gives credit on mortgage up to 90 per cent. of the price of the land and 50 per cent. of the price of buildings. In the case of ex-legionaries, disabled soldiers, or their widows or orphans, these rates may be increased.

Credit is given in various ways: In cases where the State has taken possession of the land, compensating the former owner by inscribing a credit in his favour in the compensation book, the new owner has an account opened for him with the compensation bank which takes a mortgage as security for the credit.

The State may also guarantee the debts of a new owner who borrows money from the bank on favourable terms (for building, improvements, etc.). Property thus burdened may not be transferred between living persons without the authority of the Land Office, until the debt has been completely paid off, which must be done within ten years. The debtor is under the control of that authority and if he fails to meet his engagements, summary proceedings can be instituted against him.

Besides long-term credit, applicants may obtain short-term credit either from the Land Office or, on the guarantee of that office, from the banks. The Land Office will only give credit to co-operative societies composed of persons who have acquired land; the societies in turn distribute the capital amongst their members, but they may also apply this capital to their own purposes. In this matter, the Land Office relies on the co-operation of the Raiffeisen and Schulze-Delitsch banks which are to be found in nearly all the big Czech villages. The total amount of the guarantees which the Land Office may give is fixed by the

Law at 200,000,000 crowns. A fund of 20,000,000 crowns is also being formed for the encouragement of land settlement.

§ 5. THE STATE LAND OFFICE AND ITS FUNCTIONS.

The State Land Office, situated at Prague, was formed, as has been stated, to assure the application of the agrarian reform. Its organization and functions are defined in a Law dated 11 June 1919.

The Office is under the direct control of the Council of Ministers. It is administered by a president and two vice-presidents, the president representing the Office in the Council of Ministers. Branch departments or commissaries' offices will be established, where necessary, in various parts of the country.

The Land Office registers all landed property which has been "seized"; enters the "seizure" in the "Public Books"; takes possession of the land and divides it; gives authority to sell, lease or mortgage; inspects the cultivation of the land before it is "seized"; determines the compensation payable (except when the former owner appeals to the courts); selects the applicants with due reference to their qualifications and the guarantees they offer; supplies them with credit and assists them in every way which may facilitate them in the cultivation of the land; inspects their management; encourages the formation of co-operative societies, etc.

In view of the extreme importance of agrarian reform, the Land Office is assisted by a Committee of Management, elected for three years by the Chamber of Deputies. This committee watches over the administration of the Land Office and participates in all decisions concerning important matters, such as the determination of the plan according to which a "seized" estate shall be transferred and divided.

§ 6. SUPPLEMENTARY LAWS AND FIRST APPLICATION OF THE AGRARIAN REFORM.

In accordance with the Law on "seizure," a register of all the property which has been "seized" is being made. It is now completed for Bohemia, Moravia and Silesia, but is not yet finished for Slovakia and Sub-Carpathian Russia. Table III (page 700) gives details of the estates seized in Bohemia, Moravia and Silesia.

Agrarian reform is a slow process, which does not give immediately all the results which the people expect from it. In order to respond to the legitimate desires of the people, it was decided to undertake, side by side with it, agrarian reform properly so-called, that is, the improvement of the land-system. In this connection may be specially noted a Law dated 27 May 1919 concerning the acquisition of land by small tenant farmers. This law allows any farmer, who has taken on lease land belonging to the State, "seized" land entered in the "Public Books," or land belonging to the Church or to religious institutions, to buy such land at the prices prevailing in 1913, provided that he has held it on lease

TABLE III. — *Area of Estates "Seized" in Bohemia, Moravia and Silesia.*

	Bohemia	Moravia	Silesia	Total
	Hectares	Hectares	Hectares	Hectares
Fields	392,988	139,562	17,320	549,870
Meadows	92,936	24,163	2,861	119,960
Gardens	11,750	2,727	437	14,914
Vineyards	191	107	—	298
Pastures	35,970	10,601	1,152	47,723
Alpine pastures	33	24	—	57
Forests	928,164	461,482	77,524	1,467,170
Lakes, marshes	32,300	4,991	35	37,326
Building land	3,748	1,396	339	5,483
Waste land	5,122	1,382	101	6,605
Tax-free land	4,744	2,038	627	7,409
Total	1,507,946	648,473	100,396	2,256,815

since 1 October 1913 and that the total land which he occupies does not exceed 8 hectares. Any tenant farmer, who though complying with these conditions did not wish to buy the land which he holds, could apply to the local tribunal for a ten years' renewal of his lease.

It is estimated that 150,000 hectares of land are affected by the Law to which we have just referred. This figure is rather too low, because it has already been necessary to prolong the period within which the right of option may be exercised, particularly in Slovakia and Sub-Carpathian Russia, where the agricultural population is less advanced, and is unable to profit by the law to the same extent as the farmers of Bohemia, Moravia and Silesia.

We have already mentioned, at the end of section 3, the compulsory leasing imposed on the large land-owners. This measure, which has in view agreements for periods of not more than six years, permits, at any rate, a small amount of land being secured by those who have need of it to earn their livelihood. This has been especially beneficent in Slovakia and Sub-Carpathian Russia where the agriculturists are poor and backward. In Sub-Carpathian Russia the prevailing form of tenancy agreement, was, up to then, a sort of *métayage* under which the cultivator was obliged to pay as much as two thirds of the produce of the soil to the estate owner or large farmer who had given the fields and seed. The situation of small farmers in Slovakia is no better.

Lastly we must note how, according to the Law, "seized" lands can be acquired by those who desire to build upon them. All the territory of the State was dealt with in a measure put into force in 1921. It applies also to the isolated parcels of land which remained in posses-

sion of the large landowners after the law concerning the acquisition of land by small tenant farmers came into force

The carrying out of agrarian reform in Czechoslovakia has only just begun. Up to the present an effort has been made to carry it out on an estate of 9,238 hectares in Slovakia and on two estates in Bohemia (320 hectares and 6,526 hectares). The Land Office had in 1920 drafted several laws and decrees, had completed its organization, and furthermore, had established sub-offices at Užhorod (for Sub-Carpathian Russia), at Trenč Teplice (for Slovakia) and at Brno (for Moravia). In 1921 it intends to take possession of "seized" lands in accordance with plans which were adopted after long deliberation. In Bohemia, Moravia and Silesia it is going to begin by dealing with estates of over 5,000 hectares; and in Slovakia and Sub-Carpathian Russia with estates of over 5,000 cadastral arpents. It will "seize" all waste land, as well as lands which are badly cultivated or continually let, and then lands used as a means of hiding excess war profits, and lands which the owner does not personally cultivate. On the other hand model farms, or farms remarkable from the point of view of art or of natural beauty will not be touched and special regard will be had to the interests of agriculture, and particularly of the sugar industry.

III. — MISCELLANEOUS QUESTIONS

AUSTRIA.

THE MEASURES ADOPTED FOR THE ENCOURAGEMENT OF AGRICULTURE DURING THE WAR (1914 TO 1918).

(Conclusion)

By Dr. HERMANN KALLBRUNNER
Agricultural Engineer

(h) *Measures relating to Vine-growing.* — In regard to vine-growing the provisions of the government — apart from those already enumerated, among which the most important were those for protection of the vines against diseases — were confined to ensuring the sale of the produce. The market was often too restricted, especially during the first years of the war, but it improved perceptibly later because of the great diminution in the production of beer. Most important for the vine-growers was the measure which obliged them to collect the grape seeds (Decree of 4 October 1916, R. G. Bl., No. 308) to be sent to the oil factories, and later to the Schicht factory for the extraction of the fats, at Schreckenstein, near Aussig. The excessively low prices, fixed at the rate of 20 heller

per kilogramme, did not compensate for the labour of collecting the seeds, so that the quantity delivered continually diminished; in fact while in 1915 the quantity furnished was 9,100 quintals, only 4,439 quintals were furnished in 1916 and 2,310 quintals in 1917.

As the vintage of 1916 was very poor, and owing to the increasing scarcity of sugar it was difficult to obtain it for making the inferior kinds of wine, a measure was passed on 11 August 1916 (*R. G. Bl.*, No. 255) granting special assignments of sugar to those vine-growers who in the years from 1909 to 1913 had made use of it for that purpose.

(i) *Measures relating to the Cultivation of Sugar Beet.* — With regard to the cultivation of sugar beet two diametrically opposite tendencies may be observed. In 1914 and 1915 there was abundance of sugar, because exportation, usually so extensive, was impossible; the efforts to promote the development of beet cultivation were discontinued, as shown for instance by the measure already mentioned for reducing the contracts for the production of sugar beet. Then an attempt was made to encourage it when it was found that the scarcity was continually increasing. But the aid granted was of little use, because the want of draught animals, labour, and fertilizers, etc., made it impossible to increase the area cultivated. Nor were the prices of the beet likely to make it to the interest of the agriculturists to grow it. The cultivation of cereals, simpler and less laborious, often seemed more profitable. The Decree of 18 February 1916 increasing to 4 crowns per quintal the price of sugar beet was therefore important. In order to appropriate the whole crop of beet to the production of sugar, a Decree was issued on 31 March 1916 (*R. G. Bl.*, No. 89) forbidding its use for any other purposes, more especially for fodder. Part of the beet was appropriated to the production of spirit, and part to make substitutes for coffee.

The State control of sugar, introduced by a Decree of 4 March 1916 (*R. G. Bl.*, No. 61) was of great importance for agriculture, in view of the consumption and production of preserved fruit for domestic use.

The following figures (1) show most eloquently the effect of war difficulties on the production of sugar:

Year —	Area — hectares	Refineries at work	Production of raw sugar quintals	Production of sugar per hectare quintals
1914	431,000	201	1,965,443	39.10
1915	424,180	196	1,602,314	37.77
1916	266,320	188	938,936	35.26
1917	266,100	186	935,233	35.15
1918	288,010	184	668,250	23.20

(1) See: STATISTISCHE JAHRBUCHER DES K. K. ACKERBAUMINISTERIUMS for the year 1914 and the following years. Vienna 1915, etc. — ANBAUFLÄCHEN UND ERNTEERGEBNISSE IN ÖSTERREICH IM JAHE 1917. Vienna, 1918. — BERICHT DER HANDELS- UND GEWERBEKAMMER.

(e) *Measures relating to Potatoes, Seeds, etc.* — To prevent the potato crops as far as possible from becoming mouldy, establishments were built for the dessication of potatoes, first by co-operative societies, afterwards by private firms and lastly by the cities of Vienna and Brünn, all with strong support from the State. In all 51 establishments were erected, with a capacity of 30,000 waggons, but owing to the continued scarcity of coal they could never be fully used, and they only worked for a part of 1917, remaining quite inactive in 1918.

A Decree of 30 September 1916 (*R. G. Bl.*, No. 340) instituted a War Federation of Establishments for the Dessication of Potatoes (*Kriegsverband der Kartoffeltrocknereien*) with the object of simplifying the trade in potatoes.

Even in the first year of the war an effort was made to protect from requisition the more valuable seeds, and by distributing them to agriculturists to increase the average yield of grain.

In the course of the war these measures continually grew more difficult. Matters which affected but lightly the plans for maintaining the food supply, such, for instance, as the serious damage to the cereal crops in the winter of 1915-16 which made new spring sowing necessary, disturbed the whole system of seed supply which forms an important part in the cultivation of cereals, of which we shall soon speak. To avoid possible abuses in the use of seed corn (*Saatgut*) and on the other hand to prevent the grinding of cereals cultivated for seed, the seed trade was placed under various regulations, of which the most important were those of 22 July 1915 (*R. G. Bl.*, No. 204), and of 26 October 1915 (*R. G. Bl.*, No. 321), because to encourage larger production they fixed supplementary prices. The cereals designated as "original" (*Originalzucht*) or "derived" (*Nachsaat*) had to be recognized as such, and provided with an express certificate from the Seed Control Station of Vienna, after inspection of the growing crops and examination of the seed in the laboratory.

Up to the end of 1915, 35,000 quintals of seed, in round numbers, had already been placed on the market.

Very important measures were taken for procuring maize for seed for those localities where maize cannot reach maturity but is cultivated for green fodder.

By a Decree of 22 September 1915 (*R. G. Bl.*, No. 276) the trade in seed potatoes was for the first time regulated, and a supplement fixed to the existing prices for potatoes for consumption. There were two distinct classes of seed potatoes: Original seed (I) and potatoes from ordinary seeds (II). The commissions for the first class were undertaken by the Seed Control Station, those for the second by the appointed organizations. The Ministry of Agriculture fixed the supplementary prices. It was laid down that a grower might sell for seed 25 per cent. at most of his crop and that he must explain in detail the methods of cultivation which he adopted.

The supply of beet seed from Germany becoming increasingly difficult, the Government took steps to encourage a larger home production.

Serious difficulties attended the supply of seed to those agriculturists who intended to grow flax; the seed before the war came almost exclusively from Russia, but now, owing to the scarcity of flax, larger areas were devoted to its cultivation. The subject was regulated by Decrees of 4 January 1916 (*R. G. Bl.*, No. 7), and of 26 June 1916 (*R. G. Bl.*, No. 198) in such a manner as to effect the distribution of the small available quantity of seed in the best way possible.

By a Decree of 26 July 1916 (*R. G. Bl.*, No. 233) it was provided that special publicity should be given to the sale of seeds and that they should be supplied separately. In the choice of the seed, special consideration was to be given to the requirements of the place to which it was destined. In the year 1916-17, in round numbers, 60,000 quintals of cereals for seed, and 7,000 quintals of vegetable seeds were disposed of.

By a Decree of 18 October 1916 (*R. G. Bl.*, No. 362) some changes were made in the trade in seed potatoes, and the supplementary price was increased for potatoes grown for seed.

Some other provisions on this subject were made by the Decrees of 6 August and 23 September 1917, and by that of 1 July 1918.

A Decree of 24 November 1916 (*R. G. Bl.*, No. 396) fixed the maximum prices for clover seed and the trade was entrusted to a War Consortium (*Kriegsverband*). By a Decree of 19 December 1916 (*R. G. Bl.*, No. 433) the genuineness, purity and germinating power of all clover seeds were to be tested by the Seed Control Station at Vienna.

(k) *Supply of Cereals and Meat.* — Government measures of the greatest importance to agriculture were taken to ensure a supply of cereals to the people, both as bread and as flour, with as much uniformity as possible.

In order to increase the meat supply for the people, and to make artificial breeding of game unnecessary, arrangements were made to encourage shooting. With this view licenses were granted to sportsmen, lead for making shot was distributed gratis, and steps were even taken to avoid the employment for military purposes of sporting dogs (1) (Decree of 6 December, 1915, *R. G. Bl.*, Nos. 335 and 336). To secure a supply of game for hospitals a by-law was made compulsory (Order of 27 April 1917, *R. G. Bl.*, No. 185).

(l) *Measures for the Supply of Feeding Stuffs.* — The provisions for ensuring food for cattle were very numerous. When an increasing quantity of produce, such as barley (2) and also to some extent oats (3),

(1) Following the example of Belgium columns of vehicles drawn by dogs were formed during the war, which, in general, however, were not very successful, as only very few dogs are adapted for this work.

(2) A Decree of 5 January 1915 (*R. G. Bl.*, No. 5) forbade the feeding of cattle with wheat and rye, and restricted the use of barley for this purpose. This last was entirely forbidden by a Decree of 21 February 1915 (*R. G. Bl.*, No. 41).

(3) The daily quantity of oats allowed for feeding a horse was reduced to 3 kilogrammes by the Decree of 21 February 1915, and to 1 kilogramme by that of 11 May 1915.

beetroot grown for fodder and sugar-beet, was appropriated as human food, when restrictions were placed on breweries, distilleries, and sugar factories from which concentrated food had previously been obtainable, when more rigorous rules were applied to grinding, so that the quantity of bran produced was smaller and its quality was inferior, when it was necessary to send great stores of hay and straw to the front for horses, the feeding of cattle became more difficult and more irregular. All these things had a most injurious effect on their nutrition and health, but especially on the yield of milk given by dairy cows.

We have already referred to the provisions by which land capable of growing forage crops but remaining uncultivated, was to be assigned to persons who would cultivate it.

A Decree of 8 May 1915 (*R. G. Bl.*, No. 58) introduced the State control of bran, and the Department for the Sale of Live Stock (*Viehverkehrsstelle*) was directed to concentrate all the available bran and to make a uniform distribution. For this purpose a special section was formed (*Futtermittelabteilung*) which was also to arrange for supplying agriculture with fodder of other kinds.

The prohibition to feed live stock on green cereals had serious results. Owing to the scarcity of grain it was necessary to provide against any diminution of the crop (Decree of 19 May 1915, *R. G. Bl.*, No. 128).

For feeding cattle in the spring of 1915, the quantities of maize, which for one reason or another was unfit for human food, were of great value, and were placed at the disposal of the *Maiszentrale*, an office charged with the duty of regulating the trade in maize. The great stores of sugar originally intended for exportation were also most valuable, because having been left in the country and no duty having been put upon them they were mixed with bran and colouring matter and placed at the disposal of stock breeders at very low prices. The molasses were utilized for making spirit, and were thus not available for feeding stock.

The use of brewers' yeast, dried and with the bitterness removed, was introduced as a new feed, and sometimes as human food. But the quantity available was very limited, and continually diminished as the breweries were closed.

On the initiative of the Government more use was made of the blood of slaughtered animals. The Government also made an active propaganda for utilizing refuse from the kitchens of families in towns, but with little result, because the refuse of the large kitchens was already utilized, and collecting that of single houses in such a way as to keep it fresh did not seem profitable, indeed seemed almost impossible. The attempts of some organizations to collect vegetable refuse from houses, to be utilized for rearing poultry, had to be abandoned very soon, because of the impossibility of collecting the refuse every day, and of the objections to collecting it at longer intervals, owing to its rapid decay.

By means of leaflets, articles etc. the Government endeavoured to call the attention of owners of cattle to the new feeding stuffs and to the necessity of economy in the feeding of animals.

A slight improvement in the conditions regarding feeding stuffs was made by the Decree of 21 July 1915 (*R. G. Bl.*, No. 203) giving permission to use one fourth of the barley crop for feeding stock. Agriculturists also had a right to half the bran obtained from the cereals consigned by them.

For the better distribution of feeding stuffs, the Decree of 11 August 1915 (*R. G. Bl.*, No. 232) established a Central Office, the *Futtermittelzentrale* aided by a Technical Council, composed of agriculturists. In the various Crown countries regional offices for the same purpose were established; in Vienna a special organization was formed for provisioning owners of horses and dairy cows in the city. The Central Office had at its disposal bran, damaged maize, and raw sugar (1) and later, after a requisition had been made, oil seeds of all kinds; rape-seed and rape-seed cakes were requisitioned by a Decree of 25 July 1915 (*R. G. Bl.*, No. 210) and by another of 14 August 1915 (*R. G. Bl.*, No. 238) the requisition was extended to sunflower seed cakes, gourd, cocoa, flax, hemp, poppy, and ground-nut seed. Oil-cakes imported from abroad were entrusted to the Central Office for sale. The Office had no brewers' grains at its disposal; the small quantities available were left for the manufacture of pressed yeast. On the other hand by a Decree of 24 September 1915, it was empowered to dispose of the fourth part of the refuse of molasses. The agriculturists who grew beetroot, and those who furnished milk to the towns were supplied first with this refuse.

In order to regulate the prices of ordinary feeding stuffs, a Decree of 10 January 1916 (*R. G. Bl.*, No. 12) fixed maximum prices for hay and straw, and the district authorities were empowered to requisition the hay necessary for civilians and for the army.

The use of substitutes for the usual feeding stuffs was encouraged by a propaganda conducted by various government bodies and facilities were given for their preparation, especially in forests belonging to the State.

In the third year of the war the situation grew even worse, especially because all the oats had been requisitioned; very little was left and that only for race horses and stud horses. Maize was to be had only in very small quantities.

By a Decree of 28 September 1918 (*R. G. Bl.*, No. 330) the gathering of horse chestnuts was ordered. The aid of teachers and pupils in schools in this work was regulated by an agreement with the Ministry of Instruction. In the various localities centres for collection were formed; then district institutions were established and a central office was opened at the Ministry of Food Supply which also arranged for the gathering of other wild fruits.

A Decree of 27 July 1916 organized the Central Feeding Stuffs Office (*R. G. Bl.*, No. 232). In addition to the head office in Vienna, Feeding

(1) Up to 31 January 1916 this Central Office had distributed 441,500 quintals of raw sugar.

Stuffs Offices were established in the different provinces, and for the examination of new kinds of feeds a special technical committee was appointed.

A Decree of 15 July 1916 (*R. G. Bl.*, No. 220) allowed agriculturists to use the less important kinds of cereals and mixed produce for feeding stock.

A Decree of 10 October 1916 (*R. G. Bl.*, No. 220) required the sugar refineries to dry and consign to the Feeding Stuffs Office for distribution all the beet pulp that they were not obliged by contract to hand over to the producers. The Decree of 24 January 1917 (*R. G. Bl.*, No. 25) placed the sale of lupins under State control, because vetches were often falsely declared to withdraw them from State control, and lupins were utilized as a substitute for coffee.

Strict limitations were rendered necessary by the poor hay crop of 1916, involving special measures, more particularly in the towns. A Decree of 13 March 1917 (*R. G. Bl.*, No. 111) forbade the use of hay for packing, and restricted to the smallest quantity its employment as food for wild animals. A Decree of 29 May 1917 (*R. G. Bl.*, No. 243) requisitioned the whole of the forage crops except so much as was needed by the producer, and their distribution was entrusted to the Central Feeding Stuffs Office (*Futtermittelzentrale*). The agricultural co-operative societies were directed to take delivery of the produce and only where no such society existed recourse was had to tradesmen. The requisition prices were fixed by the Decree of 14 June 1917 (*R. G. Bl.*, No. 256).

On 1 March 1917 a Department for Substitutes for Feeding Stuffs (*Ersatzfuttermittelabteilung*) was instituted which placed on the market a feed for horses, intended as a substitute for oats, and a composite feed rich in albumen for cows, pigs and poultry.

The pressed olives remaining over from previous years were subjected to a new process for extracting all the fatty matter. The residue was utilized for feeding stock. To provide more food for stock mills were built for grinding hay, and the meal thus obtained was used as food for pigs. But most of these mills could not work for want of hay.

More important were the attempts to dissolve great masses of straw, boiling it with soda under pressure so as to separate the digestible parts from the indigestible exterior.

To protect agriculturists from swindlers, the production and price of feeding stuffs were placed under control, a measure of urgent necessity because many substitutes for feeding stuffs of very doubtful utility had been placed on the market (Decree of 30 August 1916, *R. G. Bl.*, No. 277). This was completed by that of 31 March 1918 (*R. G. Bl.*, No. 125) which forms an appendix to the *Codex alimentarius Austriacus*. This publication, of which the third and last volume appeared at the beginning of 1918, gives a detailed description of all the feeding stuffs ordinarily used in Austria. The Central Feeding Stuffs Office (1) also tried experiments with many forage plants lately discovered or proposed.

(1) The Central Feeding Stuffs Office, dissolved as such on 31 July 1919, was transformed into the Office for Trade in Feeding Stuffs (*Futtermittelverkehrsstelle*) which now carries on some

(m) *Measures relating to Stockbreeding.* — The Government measures with regard to this subject were very varied. At first they only aimed at preventing excessive consumption and diminished breeding, and for this purpose very strict provisions were made, but without effect, for there were others with a contrary tendency the object of which was to secure at least such supplies as were indispensable to the civil population, and still more to the army in the field.

Among measures of a public character we may mention those of the latter half of 1914, made for the purpose of limiting the offers of live stock in large numbers for slaughter. The difficulties in individual farms, the want of managers and of male labourers, the fall in prices at the beginning of the war, and here and there reports spread purposely by unscrupulous traders, led to these offers in great numbers, as may be clearly seen from the statistics of the Vienna Market Office. To that market 19,511 head of stock were sent from Austria, exclusive of Galicia, in the latter half of 1913, while in the corresponding period of 1914 the numbers were 55,152. And the live stock sent from Hungary also rose from 63,163 head to 105,103 head (1). An effort was made to check this movement, chiefly by propaganda but also by measures against traders (2) and by publishing prices.

A Decree of 14 October 1914 (*R. G. Bl.*, No. 285) prohibited the slaughtering of calves; another of 23 December 1914 (*R. G. Bl.*, No. 325) that of cows not fully grown and of breeding sows, and lastly one of 8 May 1915 (*R. G. Bl.*, No. 114) when milk was growing scarce forbade the slaughtering of cows of any kind. Exportation of live stock was also prohibited, and importation encouraged.

In order to limit the consumption of meat, and thus to economize the already diminished herds, a Decree of 8 May 1915 (*R. G. Bl.*, No. 113) forbade the use of meat for two days every week. Later Decrees still further reduced the consumption of meat, and finally restricted it to a small fixed number of weeks.

As mutton, less prized in Austria, was exempted from these restrictions, the demand for it increased to an extraordinary extent, and this had the effect of reviving the breeding of sheep, which had been considerably neglected. In some parts of the country the sheep increased in number

of the former work. Against it, as usual against all similar offices, the advocates of a free market carry on a bitter struggle. But it must be remembered that a sudden and general dissolution of such departments would involve serious dangers. Not to mention the difficulties now in the way of importation from abroad by private individuals, there is the risk that those who are financially and politically the strongest would take possession of all the supplies and others would remain deprived even of the small quantities now supplied to them.

(1) See: *WIRTSCHAFTSGEOGRAPHISCHE KARTEN UND ABHANDLUNGEN ZUR WIRTSCHAFTSKUNDE DER LÄNDER DER EHEMALIGEN ÖSTERREICHISCH-UNGARISCHEN MONARCHIE*. Vienna, 1919.

(2) According to a Decree of 8 May 1915 (*R. G. Bl.*, No. 115) no one might trade in cattle unless provided with a license from the authorities.

and this is to some extent owing to the efforts of associations newly formed for the breeding of sheep (1).

A Decree of 26 November 1915 (*R. G. Bl.*, No. 345) almost entirely prohibited the use of milk for feeding calves and young pigs; and this measure which was taken in order to promote a better supply of milk in towns and industrial centres, had a most injurious effect on the breeding of live stock, more especially as other feeds were growing scarce. In these unfavourable circumstances it was not even possible to maintain in force the law forbidding the slaughtering of calves, so that it became necessary to revoke the Decree of 21 December 1915. The other regulations prohibiting the slaughter of different kinds of stock, except those relating to breeding animals, were revoked by the Decree of 15 March 1917 (*R. G. Bl.*, No. 117).

As the difficulty of procuring suitable sires continually increased, the regulations previously issued by all the public offices regarding the reproduction of pure bred animals were withdrawn. This seriously affected the quality of the dairy cattle, which had already deteriorated as a result of the want of persons capable of keeping the herd-books, even without this new cause of deterioration.

Stock breeders were seriously injured by the requisitions which obliged them to consign a number of head of cattle superior to the number of young animals they possessed, while the prices were considerably lower than the cost of production. Besides the maximum prices fixed by numerous Decrees there were the prices in clandestine trade (the free sale of live stock was gradually suppressed: a Decree of 21 November 1916, *R. G. Bl.*, No. 395, ordered the closing of the great cattle market of Vienna) which were considerably above cost prices and led to the *Schwarzschlachten*, clandestine slaughter, the profits of which made it worth while to risk an eventual fine.

But in any case the low official prices did not tend to promote production. Requisitions were made by the Offices for the Sale of Live Stock (*Viehverkehrsstellen*) (2) under the supervision of the public authorities.

Certain administrative measures passed in 1916 with the object of extending the employment of stud animals for a longer period than had

(1) See the publication: *MASSNAHMEN ZUR FÖRDERUNG DER SCHAFZUCHT ÖSTERREICHS*, published by the *Österreichische Landwirtschaftsstelle* in Vienna. 1921, 2nd edition. This society formed an association for sheep breeding in the mountain districts (*Alpenländische Schafzuchtsgesellschaft*).

(2) General regulations for these Offices were laid down by the Decree of September 23, 1916 (*R. G. Bl.*, No. 321). They were placed under the control of a Central Committee for the Sale of Live Stock (to be convoked, when required, by the Ministry of Agriculture) composed of representatives of the Ministries concerned, of consumers, producers and the meat industries. In each province was a Provincial Committee (*Landeskommission*) which regulated the conduct of the business and a Provincial Office for the Sale of Live Stock (*Landesviehverkehrsstelle*) to attend to the business itself. The division of the supplies to be furnished was made monthly, according to a census of live stock repeatedly made. Prices were fixed for each province according to quality.

previously been the practice, proved advantageous to the breeding of live stock. The breeding of sheep, goats and poultry was also encouraged in various ways, with special success as regarded goats, because seconded by the efforts of many who wished to ensure to themselves a little milk.

A Decree of 9 May 1910 (*R. G. Bl.*, No. 134) forbade the slaughtering of goats, and another of 9 February 1917 forbade that of sheep.

A Decree of 21 May 1916 (*R. G. Bl.*, No. 149) regulated for the first time the shearing of sheep, with the special object of preventing failure to consign the wool, which had been requisitioned by another Decree.

With regard to poultry-keeping the Government tried to work by instructive propaganda, procuring feed substitutes and establishing some large incubating stations in order to provide good means of reproduction for small poultry farmers. Numerous courses of instruction in poultry-keeping were given, partly in connection with schools of every kind, partly for particular societies, and even for disabled soldiers. Societies for the sale of eggs were formed which developed rapidly, but fell into decadence when eggs became scarce, and all that were available were requisitioned.

Among later measures, one of the most important was that which prohibited the exportation of eggs from one district to another until the district which produced them was supplied. This Decree, dated 20 February 1916 (*R. G. Bl.*, No. 48) shows for the first time the tendency, afterwards more marked, to reserve produce exclusively for the place of its origin. It led to a series of prohibitions of exportation from provinces, districts, and even communes, which made provisioning and the distribution of food according to uniform principles impossible.

Several measures were taken respecting the breeding of pigs, first fixing a maximum price for pork meat and fat (Decree of 6 July 1916, *R. G. Bl.*, No. 211 and others later) and afterwards introducing State control for these products (Decree of 15 February 1917, *R. G. Bl.*, No. 62).

Attention was directed to the modern system of pig-breeding and its objects. According to this system the pigs are fed not so much on substances of high food value as on less concentrated feeds (generally bran, grass, or beet) (1). This was encouraged as far as possible but owing to unfavourable circumstances, and the small profits to be expected, without much success.

(n) *Measures relating to the Milk Industry.* — With regard to milk, besides issuing the provisions already mentioned, arrangements were made for special courses for the training of new milkers and dairy men,

(1) See: GRITSCH, *Erfahrungen über Schweinezucht und Mast*, in No. 4 of "Arbeiten" of the "Deutsche Landwirtschaftsgesellschaft für Österreich" — PITRANI: *Richtlinien zur Förderung unserer Schweineproduktion*. Vienna, 1918 — Dr ZELL: *Welche Fingerzeige gibt uns das Wildschwein?* Vienna. — GRITSCH: *Rohfütterung, Höchstertage bei naturgemässer Schweinehaltung*. Vienna, 1915. — KALLBRUNNER: *Die Genossenschaft für rationelle Schweinezucht im Amtsbezirk Neu-Ulm*, in *Monatshefte für Landwirtschaft*, Vienna, 1913, No. 11.

disabled soldiers being used to some extent for this purpose. Some co-operative cheese factories had been unsuccessful during the first years of the war in bringing their produce before the public, and these the Government tried to assist by purchasing their goods for the army.

Maximum prices for milk were first fixed by the Decree of 26 November 1915 (*R. G. Bl.*, No. 345). When milk became scarce its use for technical purposes was forbidden, and so also was the making of cheese, except where it was impossible to sell fresh milk. At the same time the sale of milk was regulated so that children and invalids should first be provided for (introduction of coupons for milk). The Decrees of 21 August 1916, 26 November 1915 and 11 September 1916, contained in Nos. 261, 345, and 300 of the Official Gazette, obliged agriculturists to consign quantities of milk proportionate to the number and producing capacity of their cows.

(o) *Agricultural Financial Institutions.* — These institutions were of some importance to agriculture. Owing to the high prices of produce and the impossibility of investing money and even of making necessary purchases, agriculturists found themselves in possession of more ready money, which they employed chiefly in paying off their debts. (The diminution of working capital, and especially of live and dead stock, naturally resulted in a diminution of the invested capital, which served to reduce the indebtedness of the farm). This caused an unexpected increase in the available funds of the financial institutions (1) (usually invested by them in war loans by desire of the Government) and a great diminution of borrowed capital. The great provincial mortgage institutions were an exception to this rule as the large requirements of the communes and of owners of house property in the towns neutralized the effect of the repayments by the agriculturists.

(p) *Measures for Checking Speculation in Land.* — The Government, fearing that advantage might be taken of the situation caused by the war to make large purchases of agricultural property with a view to speculation and that the difficulties and inexperience of war widows and disabled soldiers might offer facilities for making illicit profits, issued several precautionary measures. Even so early as 1914, by making the offers of sale as widely known as possible, it endeavoured to increase the number of possible buyers in the hope of thus causing a competition favourable to the seller. The Government also endeavoured to assist sellers with advice, especially cautioning them against hasty sales.

Another step was taken by the Decree of 9 August 1915 (*R. G. Bl.*, No. 234) forbidding the sale of agricultural property to non-agriculturists. The Decree of 11 August 1915 (*R. G. Bl.*, Nos. 235 and 236) complementary to the preceding, established Committees for the Sale of Real Estate

(1) Soon after the outbreak of the war it was feared that immense sums would be withdrawn. By proclaiming a moratorium and by vigorous propaganda efforts were made to prevent sudden withdrawals, but this caused certain diffidence towards the savings-banks. Hoarding money became more general, in the desire always to have available cash, and for fear of taxes on capital.

(*Grundverkehrskommissionen*) and fixed their duties. These are at the head quarters of the district tribunal (*Bezirksgerichte*) and are composed of a magistrate, of persons representing the agriculturists, and of the chief men of the communes. Appeals against their decisions are decided by Provincial Committees (*Grundverkehrslandeskommisionen*). Contracts not recognized by these committees were declared void. The Decrees of 17 July 1916 (*R. G. Bl.*, No. 227) and of 30 December 1917 (*R. G. Bl.*, No. 3) completed this series of regulations, which were again fully laid down for the territory of the new Austrian State in the Law of 13 December 1919 (2) (*R. G. Bl.*, No. 583). It was clear that there must be a continued strengthening of the measures on this subject, because the demand for landed property was continually increasing, and there was a risk that much land would be withdrawn from proper cultivation, and that its price would rise to a dangerous height. The causes may be sought in the abundance of ready money in the country, in the desire to get rid of the crowns which were continually decreasing in value, and in the desire to become *Selbsteversorger* (self-supporting) and thus to be enabled to obtain supplies of provisions more easily and more satisfactorily.

(2) See SABATINI: Die gesetzlichen Bestimmungen über die Veräußerung land- und forstwirtschaftlicher Grundstücke, Vienna, 1919. — KALLERUNNEN: The Absorption of Peasant Holdings and Legislative Efforts to Counteract it, in the *International Review of Agricultural Economics*, April 1920.

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